

L Number	Hits	Search Text	DB	Time stamp
1	4965	metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
2	674788	ruthenium or Ru	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
3	1250	metathesis and (ruthenium or Ru)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
4	4349693	Osmium or Os	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:34
5	4644815	(ruthenium or Ru) or (Osmium or Os)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
6	37	trisubstituted adj alkene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
7	247	trisubstituted adj olefin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
9	192	cross adj metathesis	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
11	265460	styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
13	116	585/365.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
14	116	585/366.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
15	77	585/364.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
16	194	585/643.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
17	746	560/205.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

18	156	560/225.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
19	451	564/159.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
20	535	562/598.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
22	2252	585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
33	0	19746040.URPN.	USPAT	2003/09/30 06:35
21	3	9951344.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
23	3	"9951344"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
24	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
25	2	6316380.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
27	2	6348551.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
28	2	5936100.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
29	5	5936100.URPN.	USPAT	2003/09/30 06:35
30	1	9320111.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
31	2	19746040.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
32	20	(cross adj metathesis) and (585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
34	3	"19746040"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35
35	5	("6500975").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/30 06:35

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	4965	metathesis	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
2	BRS	L2	67478 8	ruthenium or Ru	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
3	BRS	L3	1250	metathesis and (ruthenium or Ru)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
4	BRS	L4	43496 93	Osmium or Os	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:34		
5	BRS	L5	46448 15	(ruthenium or Ru) or (Osmium or Os)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
6	BRS	L6	37	trisubstituted adj alkene	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
7	BRS	L7	247	trisubstituted adj olefin	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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7	0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
8	BRS	L8	273	(trisubstituted adj alkene) or (trisubstituted adj olefin)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
9	BRS	L9	192	cross adj metathesis	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
10	BRS	L10	140	(ruthenium or Ru) and (cross adj metathesis)	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
11	BRS	L11	26546 0	styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
12	BRS	L12	49	((ruthenium or Ru) and (cross adj metathesis)) and styrene	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
13	BRS	L13	116	585/365.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
14	BRS	L14	116	585/366.ccls.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

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15	BRS	L15	77	585/364.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
16	BRS	L16	194	585/643.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
17	BRS	L17	746	560/205.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
18	BRS	L18	156	560/225.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
19	BRS	L19	451	564/159.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
20	BRS	L20	535	562/598.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
21	BRS	L22	2252	585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
22	BRS	L33	0	19746040.URPN.	USPAT	2003/09/30 06:35		

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
23	BRS	L21	3	9951344.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
24	BRS	L23	3	"9951344"	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
25	BRS	L24	2	6316380.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
26	BRS	L25	2	6316380.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
27	BRS	L26	13	((trisubstituted adj alkene) or (trisubstituted adj olefin)) and (metathesis and (ruthenium or Ru))	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
28	BRS	L27	2	6348551.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
29	BRS	L28	2	5936100.pn.	USPAT; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
30	BRS	L29	5	5936100.URPN.	USPAT	2003/09/30 06:35		

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
31	BRS	L30	1	9320111.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
32	BRS	L31	2	19746040.pn.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
33	BRS	L32	20	(cross adj metathesis) and (585/365.ccls. or 585/366.ccls. or 585/364.ccls. or 585/643.ccls. or 560/205.ccls. or 560/225.ccls. or 564/159.ccls. or 562/598.ccls.)	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
34	BRS	L34	3	"19746040"	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		
35	IS&R	L35	5	("6500975").PN.	USPAT ; US-PG PUB; EPO; JPO; DERWE NT	2003/09/30 06:35		

	Err ors
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32	0
33	0
34	0
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NEWS	4	Feb 24	TEMA now available on STN
NEWS	5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	6	Feb 26	PCTFULL now contains images
NEWS	7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	8	Mar 24	PATDPAFULL now available on STN
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NEWS	10	Apr 11	Display formats in DGENE enhanced
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NEWS	12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	13	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
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NEWS	16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS	19	May 19	Simultaneous left and right truncation added to WSCA
NEWS	20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS	22	Jun 06	PASCAL enhanced with additional data
NEWS	23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS	24	Jun 25	HSDB has been reloaded
NEWS	25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS	26	Jul 21	Identification of STN records implemented
NEWS	27	Jul 21	Polymer class term count added to REGISTRY
NEWS	28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	29	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	30	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	31	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	32	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	33	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	34	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	35	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	36	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	37	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation

NEWS 38 AUG 18 Simultaneous left and right truncation added to ANABSTR

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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
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=> file reg

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FULL ESTIMATED COST	0.21	0.21

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STRUCTURE FILE UPDATES: 10 SEP 2003 HIGHEST RN 583020-12-6  
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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1 -->	2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN

E10 1 2-METHYL-2-BUTENE TRIMER/CN  
 E11 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERY  
 LENE COPOLYMER/CN  
 E12 1 2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER  
 /CN

=> e3

L1 1 2-METHYL-2-BUTENE/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 513-35-9 REGISTRY  
 CN 2-Butene, 2-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN .beta.-Isoamylene  
 CN 1,1,2-Trimethylethylene  
 CN **2-Methyl-2-butene**  
 CN 3-Methyl-2-butene

CN Amylene

CN NSC 74118

CN Trimethylethene

CN Trimethylethylene

FS 3D CONCORD

MF C5 H10

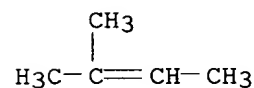
CI COM

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 CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST,  
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 ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,  
 MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, SPECINFO, TOXCENTER,  
 ULIDAT, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



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 31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 4100 REFERENCES IN FILE CAPLUS (1937 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

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FULL ESTIMATED COST	6.30	6.51

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FILE COVERS 1907 - 12 Sep 2003 VOL 139 ISS 11  
FILE LAST UPDATED: 10 Sep 2003 (20030910/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l1

L2 4102 L1

=> metathesis

11174 METATHESIS

157 METATHESES

L3 11221 METATHESIS

(METATHESIS OR METATHESES)

=> l2 and l3

L4 27 L2 AND L3

=> d l27 1-27 ti

L27 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d l4 1-27 ti

L4 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Olefin **metathesis** in a distillation column reactor

L4 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins

L4 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis of Symmetrical Trisubstituted Olefins by Cross **Metathesis**

L4 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Progress toward the Synthesis of Garsubellin A and Related Phloroglucins: The Direct Diastereoselective Synthesis of the Bicyclo[3.3.1]nonane Core

L4 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI A rapid formal synthesis of the macrolide (-)-A26771B

L4 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Process for the **metathesis** of olefins in the presence of a stabilizing agent for the catalyst

L4 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN

TI Procedure for the **metathesis** of olefinic C5 cuts with ethylene



or propylene using a catalyst of rhenium and cesium on  $\delta$ -alumina

- L4 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Continuous olefin **metathesis** or disproportionation in  
multireactor systems
- L4 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Formal Total Synthesis of Roseophilin: Cyclopentannulation Approach to  
the Macrocyclic Core
- L4 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** process and catalysts for the manufacture of  
propylene from mixtures of 1-butene, 2-butene and isobutene
- L4 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Four-step process for the conversion of C4-5 olefinic fractions into  
ethers and propylene
- L4 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of C4-alkene streams by olefin **metathesis**
- L4 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Hydrocarbon Structure Reactivity Study in ADMET Chemistry. 1.  
1,1-Disubstituted and Trisubstituted Olefins
- L4 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A Simple Allylic Amination Procedure and the **Metathesis** of  
N-Sulfinylcarbamates
- L4 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of a heptamethyltetrahydronaphthalene
- L4 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Double-insertion reaction of alkynes with methylzirconocene cation  
[Cp'2ZrMe]<sup>+</sup>: formation of an unusual distorted  $\eta^5$ -pentadienyl ligand
- L4 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Study of the gas-phase chemistry of yttrium-methyl cation YCH<sub>3</sub><sup>+</sup>:  
 $\sigma$ -bond **metathesis** and migratory insertion of C:C bonds  
into the Y-methyl bond
- L4 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic poisons in **metathesis** of 1-hexene on an  
aluminum-rhenium catalyst
- L4 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Isobutylbenzene
- L4 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and catalytic properties of W(OAr)<sub>2</sub>Cl<sub>2</sub>(CHCMe<sub>3</sub>)(OR<sub>2</sub>) and  
W(OAr)<sub>2</sub>Cl(CHCMe<sub>3</sub>)(CH<sub>2</sub>CMe<sub>3</sub>)(OR<sub>2</sub>) (Ar = 2,6-disubstituted phenyl; R = Et or  
CHMe<sub>2</sub>), new unicomponent catalysts for **metathesis** of acyclic and  
cyclic olefins, with or without functional groups
- L4 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reactions of the metal carbenes FeCH<sub>2</sub><sup>+</sup> and CoCH<sub>2</sub><sup>+</sup> with olefins in the gas  
phase. Studies involving olefin **metathesis**
- L4 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic homologation of olefins to higher and lower olefins: a  
**metathesis** related reaction

L4 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes

L4 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Olefin **metathesis**. IX. The reactivity of various olefins and the reaction mechanism for the **metathesis** over rhenium(VII) oxide-aluminum oxide catalyst

L4 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Interaction of vanadium tetrachloride with .alpha.-olefins. .pi.-Complex formation, with concomitant oligomerization, isomerization and methathesis reactions

L4 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI **Metathesis** reactions by iridium catalysts. Synthesis of cis-1,3-dialkenylcyclopentanes

L4 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Catalytic **metathesis** of .alpha.-olefins

=> ruthenium or Ru

74638 RUTHENIUM  
 20 RUTHENIUMS  
 74638 RUTHENIUM  
 (RUTHENIUM OR RUTHENIUMS)  
 56862 RU  
 185 RUS  
 57024 RU  
 (RU OR RUS)

L5 91536 RUTHENIUM OR RU

=> osmium or os

21346 OSMIUM  
 6 OSMIUMS  
 21348 OSMIUM  
 (OSMIUM OR OSMIUMS)  
 24317 OS  
 70 OSES  
 285 ORA  
 19 ORAS  
 13 OSAR  
 83 OSSA  
 24775 OS  
 (OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)

L6 35651 OSMIUM OR OS

=> 15 or 16

L7 115781 L5 OR L6

=> 15 and 17

L8 91536 L5 AND L7

=> 14 and 17

L9 5 L4 AND L7

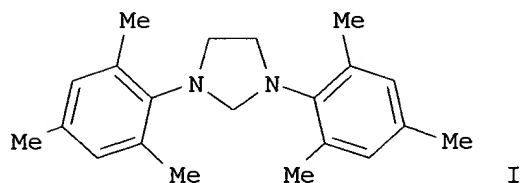
=> d 19 1-5 ti fbib abs

L9 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Preparation of **ruthenium** alkylidene complexes as catalysts for cross-**metathesis** reactions of functionalized and substituted olefins

AN 2002:777864 CAPLUS  
 DN 137:295099  
 TI Preparation of **ruthenium** alkylidene complexes as catalysts for cross-~~metathesis~~ reactions of functionalized and substituted olefins  
 IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl, Matthias; Toste, F. Dean; Trnka, Tina M.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
	US 2003100776	A1	20030529	US 2002-114418	20020401
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214

OS MARPAT 137:295099  
 GI



AB The invention pertains to the use of Group 8 transition metal carbene complexes as catalysts for olefin cross-~~metathesis~~ reactions. In particular, **ruthenium** and **osmium** alkylidene complexes substituted with an N-heterocyclic carbene ligand are used to catalyze cross-~~metathesis~~ reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for

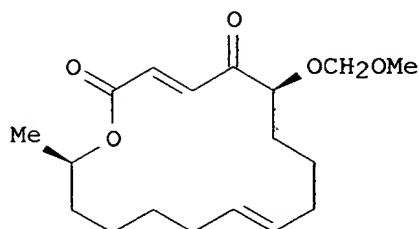
creating functional diversity using the aforementioned complexes to catalyze cross-**metathesis** reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The methodol. of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and  $\text{RuCl}_2(\text{:CHPh})(\text{IMesH}_2)(\text{PCy}_3)$  (synthetic prepn. given) [ $\text{IMesH} = (\text{I})$ ] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1        THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
                 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9    ANSWER 2 OF 5    CAPLUS    COPYRIGHT 2003 ACS on STN  
TI    Synthesis of Symmetrical Trisubstituted Olefins by Cross  
      **Metathesis**  
AN    2002:335132    CAPLUS  
DN    137:62904  
TI    Synthesis of Symmetrical Trisubstituted Olefins by Cross  
      **Metathesis**  
AU    Chatterjee, Arnab K.; Sanders, Daniel P.; Grubbs, Robert H.  
CS    The Arnold and Mabel Beckman Laboratory of Chemical Synthesis, Division of  
      Chemistry and Chemical Engineering, California Institute of Technology,  
      Pasadena, CA, 91125, USA  
SO    Organic Letters (2002), 4(11), 1939-1942  
      CODEN: ORLEF7; ISSN: 1523-7060  
PB    American Chemical Society  
DT    Journal  
LA    English  
OS    CASREACT 137:62904  
AB    Trisubstituted alkenes have been prepd. via intermol. olefin cross-  
      **metathesis** (CM) between .alpha.-olefins and sym. 1,1-disubstituted  
      olefins using an imidazolylidene **ruthenium** benzylidene complex.  
      Of particular interest is the synthesis of isoprenoid/prenyl groups by a  
      simple solvent-free CM reaction with isobutylene. In addn., prenyl groups  
      can also be installed by a cross-**metathesis** of 2-methyl-2-butene  
      with a variety of .alpha.-olefins at room temp. with low catalyst  
      loadings.

RE.CNT 28        THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
                 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9    ANSWER 3 OF 5    CAPLUS    COPYRIGHT 2003 ACS on STN  
TI    A rapid formal synthesis of the macrolide (-)-A26771B  
AN    2001:167330    CAPLUS  
DN    135:5470  
TI    A rapid formal synthesis of the macrolide (-)-A26771B  
AU    Lee, W.-W.; Shin, H. J.; Chang, S.  
CS    Department of Chemistry, Ewha Womans University, Seoul, 120-750, S. Korea  
SO    Tetrahedron: Asymmetry (2001), 12(1), 29-31  
      CODEN: TASYE3; ISSN: 0957-4166  
PB    Elsevier Science Ltd.  
DT    Journal  
LA    English  
OS    CASREACT 135:5470  
GI



I

AB (-)-A26771B, a novel 16-membered macrolide with antibiotic activity, has been formally synthesized. In the synthesis **ruthenium** catalyzed ring-closing olefin **metathesis** (RCM) was used as a key reaction to construct the lactone ring I.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene  
AN 1999:265988 CAPLUS  
DN 130:267876  
TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene  
IN Schwab, Peter; Schulz, Michael  
PA BASF A.-G., Germany  
SO Ger. Offen., 12 pp.  
CODEN: GWXXBX  
DT Patent  
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
				DE 1997-19746040A	19971017
	EP 915072	A1	19990512	EP 1998-119484	19981015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2249019	AA	19990417	DE 1997-19746040A	19971017
				CA 1998-2249019	19981016
				DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	JP 1998-295739	19981016
				DE 1997-19746040A	19971017
	CN 1218787	A	19990609	CN 1998-124565	19981017
				DE 1997-19746040A	19971017
AB	Propene (I) is prepd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the <b>metathesis</b> of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re2O7/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenenes and 2-methyl-2-butene to <b>metathesis</b> with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.				

L9 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Catalytic homologation of olefins to higher and lower olefins: a

metathesis related reaction  
AN 1985:148672 CAPLUS  
DN 102:148672  
TI Catalytic homologation of olefins to higher and lower olefins: a  
metathesis related reaction  
AU Leconte, M.; Theolier, A.; Basset, J. M.  
CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.  
SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31  
CODEN: JMCADS; ISSN: 0304-5102  
DT Journal  
LA English  
AB With Fe-SiO<sub>2</sub>, Ru-SiO<sub>2</sub> and Os-SiO<sub>2</sub> ethylene, propene,  
and isobutene disproportionated at 200-300.degree. to yield higher and  
lower olefins and methane. The reaction is catalytic when H<sub>2</sub> is present.  
The mechanism of C-C bond formation in this reaction and in  
Fischer-Tropsch reactions using the above catalysts was the same.

=> carbene

12280 CARBENE  
7187 CARBENES  
L10 14398 CARBENE  
(CARBENE OR CARBENES)

=> dhis

L11 18 DHIS

=> d his

(FILE 'HOME' ENTERED AT 10:26:03 ON 12 SEP 2003)

FILE 'REGISTRY' ENTERED AT 10:26:31 ON 12 SEP 2003

E 2-METHYL-2-BUTENE/CN

L1 1 E3

FILE 'CAPLUS' ENTERED AT 10:27:16 ON 12 SEP 2003

L2 4102 L1  
L3 11221 METATHESIS  
L4 27 L2 AND L3  
L5 91536 RUTHENIUM OR RU  
L6 35651 OSMIUM OR OS  
L7 115781 L5 OR L6  
L8 91536 L5 AND L7  
L9 5 L4 AND L7  
L10 14398 CARBENE  
L11 18 DHIS

=> l4 and l10

L12 4 L4 AND L10

=> l12 not l9

L13 3 L12 NOT L9

=> d l12 1-4 ti fbib abs

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-  
metathesis reactions of functionalized and substituted olefins

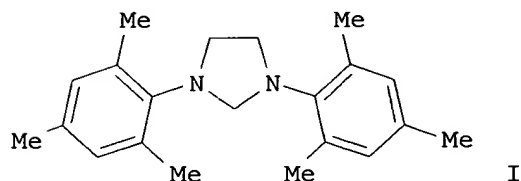
AN 2002:777864 CAPLUS

DN 137:295099

TI Preparation of ruthenium alkylidene complexes as catalysts for cross-  
metathesis reactions of functionalized and substituted olefins

IN Grubbs, Robert H.; Chatterjee, Arnab K.; Choi, Tae-Lim; Goldberg, Steven D.; Love, Jennifer A.; Morgan, John P.; Sanders, Daniel P.; Scholl, Matthias; Toste, F. Dean; Trnka, Tina M.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079126	A1	20021010	WO 2002-US10196	20020401
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
	US 2003100776	A1	20030529	US 2002-114418	20020401
				US 2001-280462PP	20010330
				US 2001-280590PP	20010330
				US 2001-284213PP	20010416
				US 2001-285597PP	20010420
				US 2001-340588PP	20011214
OS	MARPAT 137:295099				
GI					



AB The invention pertains to the use of Group 8 transition metal **carbene** complexes as catalysts for olefin cross-~~metathesis~~ reactions. In particular, ruthenium and osmium alkylidene complexes substituted with an N-heterocyclic **carbene** ligand are used to catalyze cross-~~metathesis~~ reactions to provide a variety of substituted and functionalized olefins, including phosphonate-substituted olefins, directly halogenated olefins, 1,1,2-trisubstituted olefins, and quaternary allylic olefins. The invention further provides a method for creating functional diversity using the aforementioned complexes to catalyze cross-~~metathesis~~ reactions of a first olefinic reactant, which may or may not be substituted with a functional group, with each of a plurality of different olefinic reactants, which may or may not be substituted with functional groups, to give a plurality of structurally distinct olefinic products. The method of the invention is also useful in facilitating the stereoselective synthesis of 1,2-disubstituted olefins

in the cis configuration. In a typical example of the synthesis of substituted allylic olefins, allyldiphenylphosphine oxide and  $\text{RuCl}_2(\text{:CHPh})(\text{IMesH}_2)(\text{PCy}_3)$  (synthetic prepn. given) [ $\text{IMesH} = (\text{I})$ ] are added to cis-2-butene-1,4-diacetate to give 90% of the cross product.

RE.CNT 1        THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis and catalytic properties of  $\text{W}(\text{OAr})_2\text{Cl}_2(\text{CHCMe}_3)(\text{OR}_2)$  and  $\text{W}(\text{OAr})_2\text{Cl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_2)$  ( $\text{Ar} = 2,6\text{-disubstituted phenyl}$ ;  $\text{R} = \text{Et}$  or  $\text{CHMe}_2$ ), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups

AN 1986:460720 CAPLUS

DN 105:60720

TI Synthesis and catalytic properties of  $\text{W}(\text{OAr})_2\text{Cl}_2(\text{CHCMe}_3)(\text{OR}_2)$  and  $\text{W}(\text{OAr})_2\text{Cl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_2)$  ( $\text{Ar} = 2,6\text{-disubstituted phenyl}$ ;  $\text{R} = \text{Et}$  or  $\text{CHMe}_2$ ), new unicomponent catalysts for **metathesis** of acyclic and cyclic olefins, with or without functional groups

AU Quignard, Francoise; Leconte, Michel; Basset, Jean Marie

CS Inst. Rech. Catal., Univ. Claude Bernard, Villeurbanne, 69626, Fr.

SO Journal of the Chemical Society, Chemical Communications (1985), (24), 1816-17

CODEN: JCCCAT; ISSN: 0022-4936

DT Journal

LA English

OS CASREACT 105:60720

AB Reaction of  $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}_4$  ( $\text{I}$ ;  $\text{R} = \text{Ph}, \text{Cl}, \text{Br}$ ) with 1 equiv  $(\text{Me}_3\text{CCH}_2)_2\text{MgLi}$  ( $\text{II}$ ;  $\text{L} = \text{dioxane}$ ) in  $\text{Et}_2\text{O}$  gave the corresponding  $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}_2(\text{CHCMe}_3)(\text{OEt}_2)$  ( $\text{III}$ ), whereas when 1.5 equiv of  $\text{II}$  was reacted with  $\text{I}$  ( $\text{R} = \text{Ph}, \text{Cl}, \text{Me}, \text{F}$ ) in  $\text{Et}_2\text{O}$ ,  $(2,6\text{-R}_2\text{C}_6\text{H}_3\text{O})_2\text{WCl}(\text{CHCMe}_3)(\text{CH}_2\text{CMe}_3)(\text{OR}_1)_2$  ( $\text{IV}$ ;  $\text{R} = \text{Ph}, \text{Cl}, \text{Me}, \text{F}$ ,  $\text{R}_1 = \text{Et}$ ) were obtained. Ether exchange occurred at room temp. when  $\text{IV}$  ( $\text{R} = \text{Ph}, \text{Cl}, \text{F}$ ,  $\text{R}_1 = \text{Et}$ ) was reacted with  $(\text{Me}_2\text{CH})_2\text{O}$  giving  $\text{IV}$  ( $\text{R} = \text{Ph}, \text{Cl}, \text{F}$ ,  $\text{R}_1 = \text{CHMe}_2$ ). These W complexes are the 1st examples of well defined, Lewis acid-free, homogeneous olefin **metathesis** catalysts, for which the activity and stereoselectivity is detd. by the nature of the aryloxy ligand and of the coordinated ether and which show a wide range of potential applications.

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reactions of the metal **carbenes**  $\text{FeCH}_2^+$  and  $\text{CoCH}_2^+$  with olefins in the gas phase. Studies involving olefin **metathesis**

AN 1985:166909 CAPLUS

DN 102:166909

TI Reactions of the metal **carbenes**  $\text{FeCH}_2^+$  and  $\text{CoCH}_2^+$  with olefins in the gas phase. Studies involving olefin **metathesis**

AU Jacobson, D. B.; Freiser, B. S.

CS Dep. Chem., Purdue Univ., West Lafayette, IN, 47907, USA

SO Journal of the American Chemical Society (1985), 107(9), 2605-12

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB Reactions of the title **carbenes** with several olefins and alkynes are reported. Ethene reacts with  $\text{MCH}_2^+$ , yielding exclusively  $\text{M}^+$  formation ( $\text{C}_3\text{H}_6$  elimination). Reaction of ethene with  $\text{MCD}_2^+$  yields the **metathesis** products  $\text{FeCH}_2^+$  and  $\text{CoCH}_2^+$  in 20% and 2% yields, resp. Formation of the **metathesis** product  $\text{MC}_2\text{H}_4^+$  dominates for propene with no  $\text{MCH}_2^+$  produced from  $\text{MCD}_2^+$ . Formation of  $\text{MC}_2\text{H}_4^+$  is believed to proceed through an ethene-ethylidene intermediate that rearranges to a bis(ethene) complex followed by elimination of ethene. Absence of  $\text{MCH}_2^+$  formation from reaction of  $\text{MCD}_2^+$  with propene suggests that the alkene-alkylidene conversion is the key step in **metathesis** of



olefins larger than ethene. Several other pathways compete with **metathesis** such as cyclopropanation, olefin homologation, dehydrogenation, and various C-C bond cleavages. Both **carbenes** react with butadiene generating M-c-C<sub>5</sub>H<sub>6</sub><sup>+</sup> and M-c-C<sub>5</sub>H<sub>5</sub><sup>+</sup>. Formation of Fe-c-C<sub>5</sub>H<sub>5</sub><sup>+</sup> implies D.degree. (Fe-C<sub>5</sub>H<sub>5</sub>) > 93 kcal/mol. Finally, ethyne and propyne react with MCH<sub>2</sub><sup>+</sup> to yield M<sup>+</sup> as the only product.

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes  
 AN 1980:75459 CAPLUS  
 DN 92:75459  
 TI Reactions of benzyldiene pentacarbonyltungsten with alkenes  
 AU Casey, Charles P.; Polichnowski, Stanley W.; Shusterman, Alan J.; Jones, Carol R.  
 CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA  
 SO Journal of the American Chemical Society (1979), 101(24), 7282-92  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA English  
 AB The title reactions at -78.degree. gave phenylcyclopropanes and no **metathesis** products. The relative reactivity of the alkenes was CH<sub>2</sub>:CMe<sub>2</sub> > CH<sub>2</sub>:CHMe .mchgt. C<sub>2</sub>H<sub>4</sub>, indicating that the reaction involved electrophilic attack of the **carbene** complex on the alkene. The stereochem. of cyclopropane formation was explained in terms of a transition state which involved formation of a bond from the **carbene** C of PhCHW(CO)<sub>5</sub> to the less substituted end of an alkene and interaction of the pos. polarized, more substituted end with the ipso C of the Ph group.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	51.60	58.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.86	-5.86

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 STN INTERNATIONAL SESSION SUSPENDED AT 10:41:05 ON 12 SEP 2003

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 2	"Ask CAS" for self-help around the clock
NEWS 3 SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS 4 Jul 15	Data from 1960-1976 added to RDISCLOSURE

NEWS 5 Jul 21 Identification of STN records implemented  
 NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
 NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
 Right Truncation available  
 NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective  
 August 1, 2003  
 NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
 NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in  
 September 2003  
 NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in  
 September 2003  
 NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in  
 September 2003  
 NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in  
 September 2003  
 NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
 NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
 NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right  
 Truncation  
 NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
 NEWS 18 SEP 22 DIPPR file reloaded

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 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
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 NEWS INTER General Internet Information  
 NEWS LOGIN Welcome Banner and News Items  
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:07:28 ON 22 SEP 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:07:50 ON 22 SEP 2003

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 SEP 2003 HIGHEST RN 590345-44-1

DICTIONARY FILE UPDATES: 21 SEP 2003 HIGHEST RN 590345-44-1

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when,  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	0.61

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:08:01 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 14:10:53 ON 22 SEP 2003  
FILE 'REGISTRY' ENTERED AT 14:10:53 ON 22 SEP 2003  
COPYRIGHT (C) 2003 American Chemical Society (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	0.61

=>

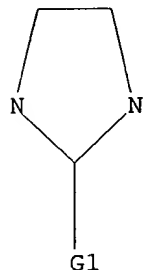
Uploading 09891144 metal ligand.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam  
SAMPLE SEARCH INITIATED 14:11:24 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15441 TO 18959  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> search l1 sss full  
FULL SEARCH INITIATED 14:11:33 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.02

L3 0 SEA SSS FUL L1

=>  
Uploading 09891144 metal ligand.str

L4 STRUCTURE UPLOADED

=> search l1 sss sam  
SAMPLE SEARCH INITIATED 14:12:38 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 860 TO ITERATE

100.0% PROCESSED 860 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 15441 TO 18959  
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L1

=> search l1 sss full  
FULL SEARCH INITIATED 14:12:46 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17578 TO ITERATE

100.0% PROCESSED 17578 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L6 0 SEA SSS FUL L1

=> logoff hold		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	296.70	296.91

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:12:58 ON 22 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS	5	Jul 21	Identification of STN records implemented
NEWS	6	Jul 21	Polymer class term count added to REGISTRY
NEWS	7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	11	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	17	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	18	SEP 22	DIPPR file reloaded
NEWS	19	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003

=> file reg  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5  
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

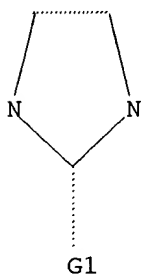
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27; Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
Uploading 09891144 metal ligand.str

L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam  
SAMPLE SEARCH INITIATED 08:32:20 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS  
SEARCH TIME: 00.00.01

7 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 15422 TO 18938  
 PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> dscan

0 DSCAN  
 L3 0 DSCAN

=> search l1 sss sam  
 SAMPLE SEARCH INITIATED 08:32:30 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

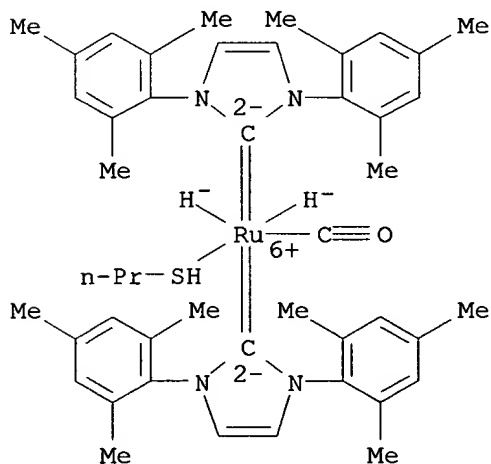
100.0% PROCESSED 859 ITERATIONS 7 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 15422 TO 18938  
 PROJECTED ANSWERS: 7 TO 298

L4 7 SEA SSS SAM L1

=> d scan

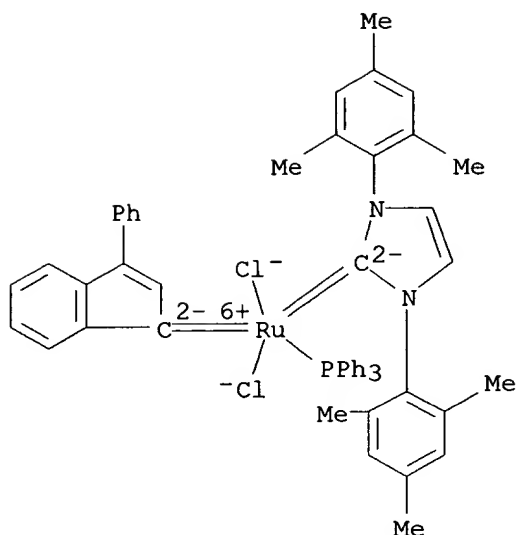
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, carbonylbis[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene]dihydro(1-propanethiol)-, (OC-6-23)- (9CI)  
 MF C46 H58 N4 O Ru S  
 CI CCS



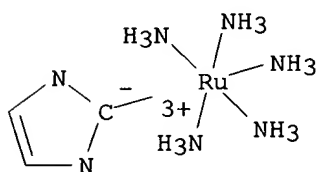
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):7

L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, dichloro[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](3-phenyl-1H-inden-1-ylidene)(triphenylphosphine)-, (SP-5-41)- (9CI)

MF C54 H49 Cl2 N2 P Ru  
 CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
 (OC-6-21)- (9CI)  
 MF C3 H18 N7 Ru . H  
 CI CCS



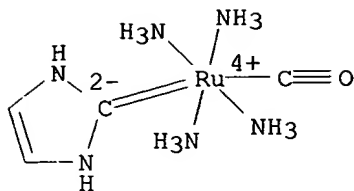
● H<sup>+</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

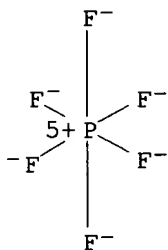
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium(2+), tetraamminecarbonyl(1,3-dihydro-2H-imidazol-2-ylidene)-,  
 bis[hexafluorophosphate(1-)] (9CI)  
 MF C4 H16 N6 O Ru . 2 F6 P

CM 1

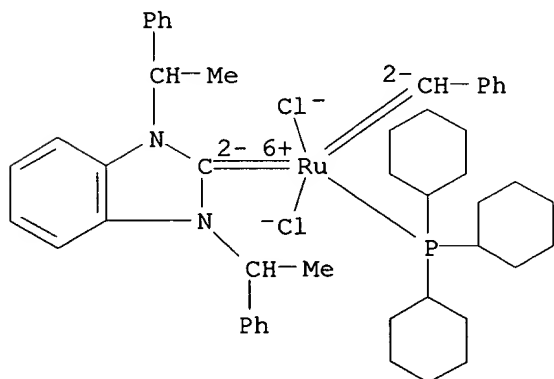




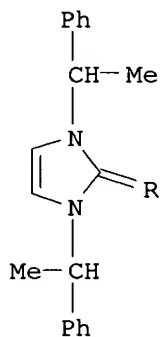
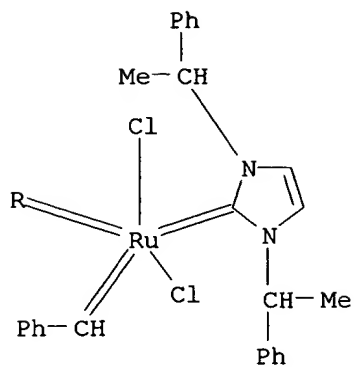
CM 2



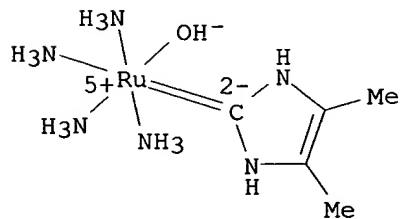
L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, dichloro[rel-1,3-dihydro-1,3-bis[(1R)-1-phenylethyl]-2H-benzimidazol-2-ylidene] (phenylmethylene) (tricyclohexylphosphine)-,  
 (SP-5-41)- (9CI)  
 MF C48 H61 Cl2 N2 P Ru  
 CI CCS



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium, dichlorobis[1,3-dihydro-1,3-bis(1-phenylethyl)-2H-imidazol-2-ylidene] (phenylmethylene)-, (SP-5-31)- (9CI)  
 MF C45 H46 Cl2 N4 Ru



L4 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
 IN Ruthenium(2+), tetraammine(1,3-dihydro-4,5-dimethyl-2H-imidazole-2-ylidene)hydroxy-, (OC-6-32)- (9CI)  
 MF C5 H21 N6 O Ru  
 CI CCS



ALL ANSWERS HAVE BEEN SCANNED

=>

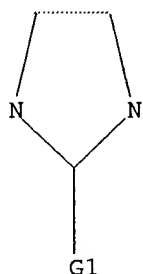
Uploading 09891144 metal ligand.str

L5 STRUCTURE UPLOADED

=> d l5

L5 HAS NO ANSWERS

L5 STR



G1 Os,Ru

Structure attributes must be viewed using STN Express query preparation.

=> search l5 sss sam

SAMPLE SEARCH INITIATED 08:33:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 859 TO ITERATE

100.0% PROCESSED 859 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 15422 TO 18938

PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

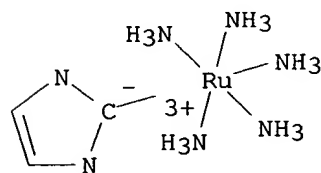
=> d scan

L6 1 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
(OC-6-21)- (9CI)

MF C3 H18 N7 Ru . H

CI CCS



● H<sup>+</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> search l5 sss full  
FULL SEARCH INITIATED 08:34:31 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 17609 TO ITERATE

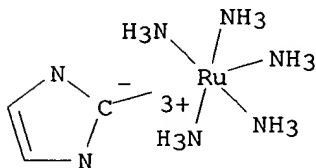
100.0% PROCESSED 17609 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

L7 2 SEA SSS FUL L5

=> d scan

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, conjugate monoacid,  
(OC-6-21)- (9CI)  
MF C3 H18 N7 Ru . H  
CI CCS

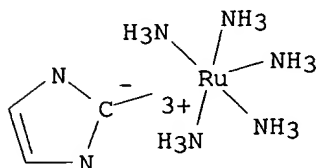


● H<sup>+</sup>

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L7 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Ruthenium(2+), pentaammine-1H-imidazol-2-yl-, (OC-6-21)- (9CI)  
MF C3 H18 N7 Ru  
CI CCS, COM



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> logoff hold\

'HOLD\' IS NOT VALID HERE  
For an explanation, enter "HELP LOGOFF".

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
154.37	154.58

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 08:35:13 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 08:44:18 ON 27 SEP 2003  
FILE 'REGISTRY' ENTERED AT 08:44:18 ON 27 SEP 2003  
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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
154.37	154.58

FULL ESTIMATED COST

=>

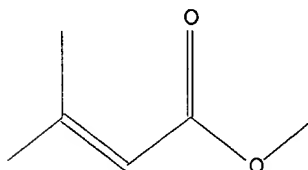
Uploading 09891144 1 trisubstitued olefin.str

L8 STRUCTURE UPLOADED

=> d l8

L8 HAS NO ANSWERS

L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l8 exact full

FULL SEARCH INITIATED 08:45:39 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 808 TO ITERATE

100.0% PROCESSED 808 ITERATIONS  
SEARCH TIME: 00.00.01

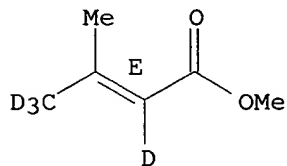
14 ANSWERS

L9 14 SEA EXA FUL L8

=> d scan

L9 14 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN 2-Butenoic-2,4,4,4-d4 acid, 3-methyl-, methyl ester, (E)- (9CI)  
MF C6 H6 D4 O2

Double bond geometry as shown.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

205.32

205.53

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 27 Sep 2003 VOL 139 ISS 14

FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 19

L10 334 L9

=> methathesis

L11 157 METHATHESIS

=> metathathesis

0 METATHATHESIS

L12 0 METATHATHESIS

=> metathesis

11215 METATHESIS

159 METATHESES

L13 11263 METATHESIS

(METATHESIS OR METATHESES)

=> l10 and l13  
L14 2 L10 AND L13

=> d l14 1-2 ti fbib abs

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Heterogeneous **metathesis** of unsaturated esters using a  
rhenium-based catalyst  
AN 1984:51004 CAPLUS  
DN 100:51004  
TI Heterogeneous **metathesis** of unsaturated esters using a  
rhenium-based catalyst  
AU Bosma, R. H. A.; Van den Aardweg, G. C. N.; Mol, J. C.  
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, 1018 TV, Neth.  
SO Journal of Organometallic Chemistry (1983), 255(2), 159-71  
CODEN: JORCAI; ISSN: 0022-328X  
DT Journal  
LA English  
OS CASREACT 100:51004  
AB The heterogeneous **metathesis** of unsatd. esters was carried out  
at room temp., using the catalyst system Re2O7/Al2O3 with an  
organometallic compd. as cocatalyst. The influence of several parameters  
on the activity of the catalyst was studied with Me oleate as substrate.  
The use of a nonpolar solvent and a cocatalyst of general formula SnR4 (R  
= n-alkyl) provided optimal reaction conditions. The activity of a  
deactivated catalyst could be completely restored by recalcination in O  
followed by addn. of cocatalyst. The reactivities of various unsatd.  
esters as a function of their mol. structure was studied; these esters  
undergo **metathesis** when the double bond and the carboxylic group  
are sepd. by at least one methylene group. In general,  
.alpha.,.beta.-unsatd. esters show a reasonable activity for cometathesis  
with simple alkenes, such as E-3-hexene.

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cyclopropane-olefin cross **metathesis**  
AN 1977:4491 CAPLUS  
DN 86:4491  
TI Cyclopropane-olefin cross **metathesis**  
AU Gassman, Paul G.; Johnson, Thomas H.  
CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, USA  
SO Journal of the American Chemical Society (1976), 98(19), 6058-9  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English  
AB A divalent C fragment can be transferred from an alkyl-substituted  
cyclopropane to an .alpha.,.beta.-unsatd. ester or nitrile to yield an  
alkene and an electron-deficient cyclopropane. This cyclopropane-olefin  
cross **metathesis** can be accomplished by utilizing the complex  
formed from PhWCl3 and either AlCl3 or EtAlCl2 (1:1) as catalyst. It is  
proposed that the catalyst system reacts with the alkyl-substituted  
cyclopropane to yield a highly nucleophilic metal carbenoid intermediate,  
which then adds to any Michael acceptor present in soln. Six Michael  
acceptors were studied. The mechanistic implications of these results are  
presented.

=> save temp all metathesis/l  
L# LIST L1-L14 HAS BEEN SAVED AS 'METATHESIS/L'

=> d his

(FILE 'HOME' ENTERED AT 08:31:44 ON 27 SEP 2003)

FILE 'REGISTRY' ENTERED AT 08:31:52 ON 27 SEP 2003

L1 STRUCTURE UPLOADED  
L2 7 SEARCH L1 SSS SAM  
L3 0 DSCAN  
L4 7 SEARCH L1 SSS SAM  
L5 STRUCTURE UPLOADED  
L6 1 SEARCH L5 SSS SAM  
L7 2 SEARCH L5 SSS FULL  
L8 STRUCTURE UPLOADED  
L9 14 SEARCH L8 EXACT FULL

FILE 'CAPLUS' ENTERED AT 08:46:16 ON 27 SEP 2003

L10 334 L9  
L11 157 METHATHESIS  
L12 0 METATHATHESIS  
L13 11263 METATHESIS  
L14 2 L10 AND L13  
SAVE TEMP ALL METATHESIS/L

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.75	219.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.30	-1.30

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 08:51:27 ON 27 SEP 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the present  
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in



September 2003

NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003

NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003

NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE

NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL

NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation

NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS 18 SEP 22 DIPPR file reloaded

NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.84	0.84

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> DIS SAVED

NAME	CREATED	NOTES/TITLE
ACETALSRCH/L	TEMP	26 L-NUMBERS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LTWENTAUGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS

METATHESIS/L	TEMP	14 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S  
NO SAVED SDI REQUESTS

=> ACT METATHESIS/L

L1	STR	
L2	(	7)SEA FILE=REGISTRY SSS SAM L1
L3	(	0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN
L4	(	7)SEA FILE=REGISTRY SSS SAM L1
L5	STR	
L6	(	1)SEA FILE=REGISTRY SSS SAM L5
L7	(	2)SEA FILE=REGISTRY SSS FUL L5
L8	STR	
L9	(	14)SEA FILE=REGISTRY EXA FUL L8
L10	(	334)SEA FILE=CAPLUS ABB=ON PLU=ON L9
L11	(	157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS
L12	(	0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS
L13	(	11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS
L14	(	2)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	0.90

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003  
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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.42	1.32

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5  
DICTIONARY FILE UPDATES: 26 SEP 2003 HIGHEST RN 593958-55-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e 2-2-butene/cn

E1	1	2-199-PROTEIN RAIDD (RIP-ASSOCIATED ICH-1/CED-3 HOMOLOGOUS P ROTEIN WITH A DEATH DOMAIN) (HUMAN CLONE HSDME38XX)/CN
E2	1	2-2 CAST IRON/CN
E3	0 -->	2-2-BUTENE/CN
E4	1	2-201-PEROXIDASE, GLUTATHIONE (HUMAN KIDNEY SELENIUM-DEPENDENT REDUCED)/CN
E5	1	2-203-PROTEIN (MYTILUS EDULIS CLONE 14-1 ADHESIVE PRECURSOR FRAGMENT)/CN
E6	1	2-206-FIBROBLAST GROWTH FACTOR 4 (HUMAN PRECURSOR)/CN
E7	1	2-206-FIBROBLAST GROWTH FACTOR K (HUMAN CLONE KS3 PRECURSOR) /CN
E8	1	2-206-PROTEIN D54 (HUMAN ISOFORM +INS2)/CN
E9	1	2-207-GLIAL-ACTIVATING FACTOR GAF (HUMAN CLONE PGAF1 REDUCED ) , 2-L-METHIONINE-/CN
E10	1	2-207-HYDRATASE, ALIPHATIC NITRILE (RHODOCOCCLUS STRAIN N-774 CLONE PYUK120 .ALPHA.-SUBUNIT REDUCED)/CN
E11	1	2-207-LIPOPROTEIN (BORRELIA GARINII GENE OSPC PRECURSOR)/CN
E12	1	2-207-PROTEIN PELLINO-3 (HUMAN)/CN

=> e 2-methyl-2-butene/cn

E1	1	2-METHYL-2-BUTENAL/CN
E2	1	2-METHYL-2-BUTENAMIDE/CN
E3	1 -->	2-METHYL-2-BUTENE/CN
E4	1	2-METHYL-2-BUTENE CATION RADICAL/CN
E5	1	2-METHYL-2-BUTENE COMPOUND WITH BROMINE (1:1)/CN
E6	1	2-METHYL-2-BUTENE COMPOUND WITH CHLORINE (1:1)/CN
E7	1	2-METHYL-2-BUTENE DIMER/CN
E8	1	2-METHYL-2-BUTENE OXIDE/CN
E9	1	2-METHYL-2-BUTENE RADICAL CATION/CN
E10	1	2-METHYL-2-BUTENE TRIMER/CN
E11	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-CIS-2-PENTENE-PIPERY LENE COPOLYMER/CN
E12	1	2-METHYL-2-BUTENE-.ALPHA.-METHYLSTYRENE-PIPERYLENE COPOLYMER /CN

=> e3

L15 1 2-METHYL-2-BUTENE/CN

=> e 2-methyl-propene/cn

E1	1	2-METHYL-P-QUATERPHENYL/CN
E2	1	2-METHYL-P-TERPHENYL/CN
E3	0 -->	2-METHYL-PROPENE/CN
E4	1	2-METHYL-PROPENE-1,3-BUTADIENE-2-METHYL-1-BUTENE POLYMER/CN
E5	1	2-METHYL-PYRIDINE OXIDE COMPLEX WITH IODIDE/CN
E6	1	2-METHYL-S-CYSTEINE METHYL ESTER HYDROCHLORIDE/CN
E7	1	2-METHYL-S-TRIAZINE-4,6-THIOL/CN
E8	1	2-METHYL-S-TRIAZOLO(1,5-A)PYRAZINE/CN
E9	1	2-METHYL-S-TRIAZOLO(1,5-A)PYRIMIDINE/CN
E10	1	2-METHYL-S-TRIAZOLO(1,5-B)PYRIDAZINE/CN
E11	1	2-METHYL-SEC-BUTYLBENZENE/CN
E12	1	2-METHYL-TERT-BUTYLBENZENE/CN

=> e isobutene/cn

E1	1	ISOBUTEN-1-ONE/CN
E2	1	ISOBUTENAL/CN
E3	1 -->	ISOBUTENE/CN
E4	1	ISOBUTENE CATION/CN
E5	1	ISOBUTENE CATION RADICAL/CN
E6	1	ISOBUTENE DIMER/CN
E7	1	ISOBUTENE DIMER RADICAL CATION/CN
E8	1	ISOBUTENE GLYCOL/CN
E9	1	ISOBUTENE HOMOPOLYMER/CN
E10	1	ISOBUTENE OXIDE/CN
E11	1	ISOBUTENE OXIDE POLYMER/CN
E12	1	ISOBUTENE OZONIDE/CN

=> e3

L16 1 ISOBUTENE/CN

=> e propene/cn

E1	1	PROPENAL-2-VINYLPYRIDINE COPOLYMER/CN
E2	1	PROPENAMIDE/CN
E3	1 -->	PROPENE/CN
E4	1	PROPENE CATION RADICAL/CN
E5	1	PROPENE COMPOUND WITH CHLORINE (1:1)/CN
E6	1	PROPENE DICATION/CN
E7	1	PROPENE HEPTAMER/CN
E8	1	PROPENE HOMOPOLYMER/CN
E9	1	PROPENE ISOTACTIC POLYMER/CN
E10	1	PROPENE MONOOXYGENASE/CN
E11	1	PROPENE OCTAHYDRATE/CN
E12	1	PROPENE OXIDE/CN

=> e3

L17 1 PROPENE/CN

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.86	15.18

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FILE COVERS 1907 - 28 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 26 Sep 2003 (20030926/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l15/prep

4107 L15  
3056971 PREP/RL  
L18 428 L15/PREP  
(L15 (L) PREP/RL)

=> l16

L19 13922 L16

=> l17

L20 37158 L17

=> l19 and l20

L21 3908 L19 AND L20

=> l18 and l21

L22 60 L18 AND L21

=> carbene

12311 CARBENE  
7206 CARBENES  
L23 14436 CARBENE  
(CARBENE OR CARBENES)

=> l22 and l23

L24 0 L22 AND L23

=> metathesis

11215 METATHESIS  
159 METATHESES  
L25 11263 METATHESIS  
(METATHESIS OR METATHESES)

=> l22 and l25

L26 3 L22 AND L25

=> d l26 1-3 ti fbib abs

L26 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis** in a distillation column reactor  
AN 2003:485742 CAPLUS  
DN 139:53456  
TI Olefin **metathesis** in a distillation column reactor  
IN Podrebarac, Gary G.  
PA Catalytic Distillation Technologies, USA  
SO U.S., 12 pp.  
CODEN: USXXAM

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6583329	B1	20030624	US 1998-35174	19980304
				US 1998-35174	19980304

AB The **metathesis** process is carried out in a reaction distn. column for: (A) for the prodn. of propylene from the **metathesis** of 2-butene and ethylene; (B) for the prodn. of detergent-range olefins from the **metathesis** of C15 and heavier olefins with C9 and lighter olefins; (C) for the prodn. of 2-methyl-2-butene and propylene from the **metathesis** of 2-butene and isobutylene; and (D) for the prodn. of tetramethylethylene from the **metathesis** of isobutylene with itself and/or the reaction of diisobutylene with the ethylene produced to produce neohexene. Process flow diagrams are presented.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

AN 1999:265988 CAPLUS

DN 130:267876

TI **Metathesis** process and catalysts for the manufacture of propylene from mixtures of 1-butene, 2-butene and isobutene

IN Schwab, Peter; Schulz, Michael

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19746040	A1	19990422	DE 1997-19746040	19971017
	TW 426651	B	20010321	TW 1998-87116887	19981012
				DE 1997-19746040A	19971017
	EP 915072	A1	19990512	EP 1998-119484	19981015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2249019	AA	19990417	DE 1997-19746040A	19971017
				CA 1998-2249019	19981016
				DE 1997-19746040A	19971017
	JP 11217340	A2	19990810	JP 1998-295739	19981016
				DE 1997-19746040A	19971017
	CN 1218787	A	19990609	CN 1998-124565	19981017
				DE 1997-19746040A	19971017

AB Propene (I) is prepd in high yield and selectivity without the need for the use of excess quantities of ethylene in a process comprising: (A) the **metathesis** of mixts. of 1-butene, 2-butene, and isobutene in the presence of a catalyst system contg. .gtoreq.1 of Group VIB and/or Group VIIB (e.g., Re2O7/Al2O3) and/or Group VIII element compd(s). forming a mixt. of propene, 2-pentenenes and 2-methyl-2-butene; (B) sepg. the I from the 2-pentenenes and 2-methyl-2-butene mixt.; (C) subjecting the mixt. of 2-pentenenes and 2-methyl-2-butene to **metathesis** with ethylene to form a mixt. of I, 1-butene, and isobutene; (D) sepg. the I from the mixt. of 1-butene and isobutene; and recycling the 1-butene and isobutene to step A. Process flow diagrams are presented.

L26 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

TI Catalytic homologation of olefins to higher and lower olefins: a

metathesis related reaction  
 AN 1985:148672 CAPLUS  
 DN 102:148672  
 TI Catalytic homologation of olefins to higher and lower olefins: a  
 metathesis related reaction  
 AU Leconte, M.; Theolier, A.; Basset, J. M.  
 CS Inst. Rech. Catal., CNRS, Villeurbanne, 69626, Fr.  
 SO Journal of Molecular Catalysis (1985), 28(1-3), 217-31  
 CODEN: JMCADS; ISSN: 0304-5102  
 DT Journal  
 LA English  
 AB With Fe-SiO<sub>2</sub>, Ru-SiO<sub>2</sub> and Os-SiO<sub>2</sub> ethylene, propene, and isobutene  
 disproportionated at 200-300.degree. to yield higher and lower olefins and  
 methane. The reaction is catalytic when H<sub>2</sub> is present. The mechanism of  
 C-C bond formation in this reaction and in Fischer-Tropsch reactions using  
 the above catalysts was the same.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

SESSION WILL BE HELD FOR 60 MINUTES  
 STN INTERNATIONAL SESSION SUSPENDED AT 08:03:28 ON 28 SEP 2003

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PASSWORD:

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	ENTRY	SESSION
FULL ESTIMATED COST	21.59	36.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.95	-1.95

=> acrylonitrile

82693 ACRYLONITRILE  
 935 ACRYLONITRILES  
 L27 82949 ACRYLONITRILE  
 (ACRYLONITRILE OR ACRYLONITRILES)

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003  
ACT METATHESIS/L

-----  
L1 STR  
L2 ( 7)SEA FILE=REGISTRY SSS SAM L1  
L3 ( 0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN  
L4 ( 7)SEA FILE=REGISTRY SSS SAM L1  
L5 STR  
L6 ( 1)SEA FILE=REGISTRY SSS SAM L5  
L7 ( 2)SEA FILE=REGISTRY SSS FUL L5  
L8 STR  
L9 ( 14)SEA FILE=REGISTRY EXA FUL L8  
L10 ( 334)SEA FILE=CAPLUS ABB=ON PLU=ON L9  
L11 ( 157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
L12 ( 0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS  
L13 ( 11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L14 ( 2)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13  
-----

FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003

E 2-2-BUTENE/CN  
E 2-METHYL-2-BUTENE/CN  
L15 1 E3  
E 2-METHYL-PROPENE/CN  
E ISOBUTENE/CN  
L16 1 E3  
E PROPENE/CN  
L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP  
L19 13922 L16  
L20 37158 L17  
L21 3908 L19 AND L20  
L22 60 L18 AND L21  
L23 14436 CARBENE  
L24 0 L22 AND L23  
L25 11263 METATHESIS  
L26 3 L22 AND L25  
L27 82949 ACRYLONITRILE

=> l13 and l27

11215 METATHESIS  
159 METATHESES  
11263 METATHESIS  
(METATHESIS OR METATHESES)

L28 54 L13 AND L27

=> crowe

L29 145 CROWE

=> l28 and l29

L30 0 L28 AND L29

=> l23 and l28

L31 9 L23 AND L28

=> d l31 1-9 ti fbib abs



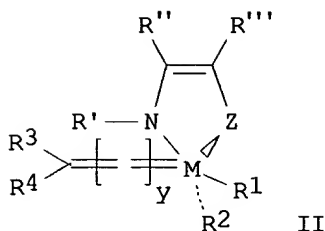
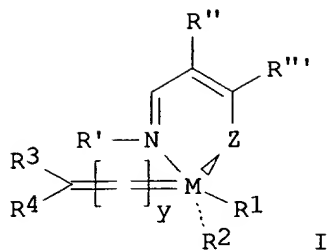
L31 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Metal **carbene** complexes, methods and intermediates for making  
 them and their use in **metathesis** reactions  
 AN 2003:568624 CAPLUS  
 DN 139:133973  
 TI Metal **carbene** complexes, methods and intermediates for making  
 them and their use in **metathesis** reactions  
 IN Verpoort, Francis Walter Cornelius; De Clercq, Bob  
 PA Universiteit Gent, Belg.  
 SO Eur. Pat. Appl., 44 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				EP 2002-75250 A	20020122
				US 2002-349956PP	20020201

PATENT FAMILY INFORMATION:

FAN 2003:591194

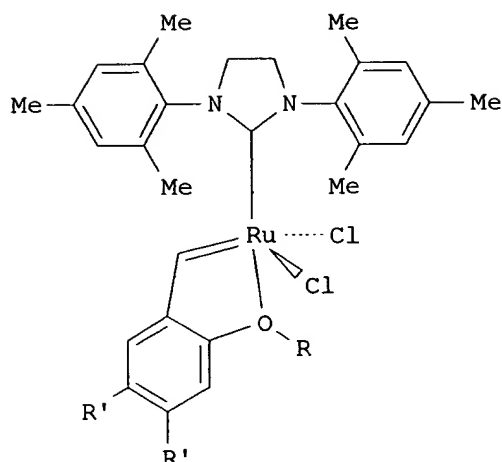
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003062253	A1	20030731	WO 2003-BE8	20030122
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				EP 2002-75250 A	20020122
				US 2002-349956PP	20020201
	EP 1329455	A1	20030723	EP 2002-75250	20020122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
OS	MARPAT 139:133973				
GI					



AB Comps. having one of the general formulas I and II [wherein: M is a metal; Z is selected from the group consisting of O, S, NR''' and PR'''; R', '' and R''' are each a radical independently selected from H, C1-6 alkyl, C3-8 cycloalkyl, aryl and heteroaryl, or R' and R'' together form an aryl or heteroaryl radical, each said radical being optionally substituted; R5 is either as defined for R', R'' and R''' when included in a compd. having the general formula I or, when included in a compd. having the general formula II, is selected from H, C1-6 alkylene and C3-8 cycloalkylene, the said alkylene and cycloalkylene group being optionally substituted; R1 is a constraint steric hindrance group having a pKa of at least about 15; R2 is an anionic ligand; R3 and R4 are each H or a radical selected from, among others, C1-20 alkyl, C1-20 alkenyl; R3 and R4 together may form a fused arom. ring system, and y represents the no. of sp<sup>2</sup> carbon atoms between M and the carbon atom bearing R3 and R4 and is an integer from 0 to 3 inclusive] are useful as catalysts for olefin **metathesis** and atom transfer radical polymn.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone  
AN 2003:246866 CAPLUS  
DN 139:85476  
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone  
AU Grela, Karol; Kim, Mikhail  
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224, Pol.  
SO European Journal of Organic Chemistry (2003), (6), 963-966  
CODEN: EJOCFK; ISSN: 1434-193X  
PB Wiley-VCH Verlag GmbH & Co. KGaA  
DT Journal  
LA English  
GI



AB One-step synthesis of ruthenium **carbene** precatalyst (I) (R = CH<sub>3</sub>, R' = OCH<sub>3</sub>) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I (R = i-Pr, R' = H).

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators

AN 2003:116375 CAPLUS

DN 138:304572

TI Dendritic stars by ring-opening-**metathesis** polymerization from ruthenium-**carbene** initiators

AU Gatard, Sylvain; Nlate, Sylvain; Cloutet, Eric; Bravic, Georges; Blais, Jean-Claude; Astruc, Didier

CS LCOO, UMR CNRS 5802, Universite Bordeaux I, Talence, 33405, Fr.

SO Angewandte Chemie, International Edition (2003), 42(4), 452-456

CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

AB Three generation of dendritic ruthenium-**carbene** complexes contg. chelating diphosphane was synthesized by extension of synthesis route of modeling a dendritic branch, the reversible dimerization of these complexes in concd. solns. Metallodendritic stars were formed by ring-opening-**metathesis** polymn. (ROMP) of norbornene using the complexes as initiator, and the dendritic effects of the initiator on the dimerization and polymn. were also investigated.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex

AN 2002:356379 CAPLUS

DN 137:201406

TI Structure and reactivity studies of the first tungsten cyanoalkylidene complex

AU Cameron, Thomas M.; Gamble, A. Scott; Abboud, Khalil A.; Boncella, James

M.  
 CS Department of Chemistry and Centre for Catalysis, University of Florida,  
 Gainesville, FL, USA  
 SO Chemical Communications (Cambridge, United Kingdom) (2002), (10),  
 1148-1149  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 137:201406  
 AB Alkylidene complex  $W(CHCMe_2Ph)(NAr)[OCMe(CF_3)_2]_2$  ( $Ar = 2, 6$   
 diisopropylphenyl) (4) reacts with one equiv. of **acrylonitrile**  
 in  $CH_2Cl_2$  to afford the tetrameric, cyanoalkylidene complex  
 $[W(CHCN)(NAr)[OCMe(CF_3)_2]_2]_4$  (5) which reacts with excess MeCN to give  
 tetrameric  $[W(N(H)CMeC(CN)CMeN)(NAr)[OCMe(CF_3)_2]_2]_4$  (6). 5 And 6 were  
 characterized by x-ray crystallog. 5 Reacts further with  $PMe_3$  in  $CD_2Cl_2$   
 to give five-coordinate alkylidene complex,  $W(CHCN)(PMe_3)(NAr)[OCMe(CF_3)_2]$   
 2 which reacts with PhCHO to give trans-cinnamionitrile as an org. product.  
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Substitution and Migratory Insertion Reactions of Square-Planar  
 Allenylidene Iridium Complexes  
 AN 2001:540828 CAPLUS  
 DN 135:273065  
 TI Substitution and Migratory Insertion Reactions of Square-Planar  
 Allenylidene Iridium Complexes  
 AU Ilg, Kerstin; Werner, Helmut  
 CS Institut fuer Anorganische Chemie, Universitaet Wuerzburg, Wuerzburg,  
 D-97074, Germany  
 SO Organometallics (2001), 20(17), 3782-3794  
 CODEN: ORGND7; ISSN: 0276-7333  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 135:273065  
 AB (allenylidene)iridium(I) complexes  $trans-[IrX\{C:C:C(Ph)R\}(PiPr_3)_2]$  [ $R =$   
 $tBu, Ph; X = Br$  (5),  $I$  (6),  $NCO$  (7, 8),  $NCS$  (9, 10),  $OH$  (11, 12),  $N_3$  (13,  
 14)] were prepd. from the corresponding chloro derivs.  
 $trans-[IrCl\{C:C:C(Ph)R\}(PiPr_3)_2]$  (3, 4) by salt **metathesis**. An  
 x-ray crystal structure anal. of 4 ( $R = Ph$ ) confirmed the almost linear  
 arrangement of the Ir-C-C-C chain. The azido compds. 13 ( $R = Ph$ ) and 14  
 ( $R = tBu$ ) react with CO by migratory insertion of the allenylidene ligand  
 into the Ir- $N_3$  bond. While  $trans-[Ir\{C.tplbond.C-CR(Ph)N_3\}(CO)(PiPr_3)_2]$   
 with  $R = tBu$  (16) is thermally stable, the related complex with  $R = Ph$   
 (15) rearranges slowly in benzene to the metalated **acrylonitrile**  
 deriv.  $trans-[Ir\{C(CN):CPh_2\}(CO)(PiPr_3)_2]$  (17) by elimination of  $N_2$ .  
 Treatment of the phenolato compd.  $trans-[Ir(OPh)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$   
 (19), obtained from the analogous hydroxo deriv. 12 and phenol, with CO  
 also proceeds by migratory insertion and affords the functionalized  
 (alkynyl)iridium(I) complex  $trans-[Ir\{C.tplbond.C-$   
 $CtBu(Ph)OPh\}(CO)(PiPr_3)_2]$  (20) in excellent yield. The Lewis basicity of  
 the hydroxo compds. 11 and 12 was also illustrated by the reactions with  
 $CF_3CO_2H$ ,  $NEt_3.cntdot.3HF$ , and  $[pyH]BF_4$ , which gave the substitution  
 products  $trans-[Ir(.kappa.1-O_2CCF_3)\{C:C:C(Ph)tBu\}(PiPr_3)_2]$  (21),  
 $trans-[IrF\{C:C:CPh_2\}(PiPr_3)_2]$  (22), and  $trans-$   
 $[Ir\{C:C:C(Ph)tBu\}(py)(PiPr_3)_2]BF_4$  (23), resp. In MeOH soln., both 11 and  
 12 react by complete fragmentation of 1 equiv of MeOH to afford the  
 octahedral (allenyl)dihydrido-iridium(III) complexes  
 $[IrH_2\{CH:C:C(Ph)R\}(CO)(PiPr_3)_2]$  (24, 25). An unprecedented type of  
 insertion reaction occurs by treating the hydroxo derivs. 11 and 12 with

an excess of 1-alkynes R'C.tplbond.CH (R' = Ph, CO<sub>2</sub>Me), which gives the novel five-coordinate Ir(III) compds. [Ir(C.tplbond.CR')<sub>2</sub>{.eta.1-(E)-CH:CR'CH:C:C(Ph)R}(PiPr<sub>3</sub>)<sub>2</sub>] (26-29). From 26, 27 (R' = Ph), and CO, the octahedral 1:1 adducts 30 and 31 are formed. The mol. structures of 22 and 26 were detd. by x-ray crystallog.

RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex  
AN 2000:872572 CAPLUS  
DN 134:207942  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene** ruthenium complex  
AU Gessler, Simon; Randl, Stefan; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin, D-10623, Germany  
SO Tetrahedron Letters (2000), 41(51), 9973-9976  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMe) Ru alkoxybenzylidene complex ([RuCl<sub>2</sub>(IHMe)(2-iPrOC<sub>6</sub>H<sub>4</sub>CH)]) are reported. The activities of the above complex and [RuCl<sub>2</sub>(PCy<sub>3</sub>)(CHPh)(IHMe)] were compared.

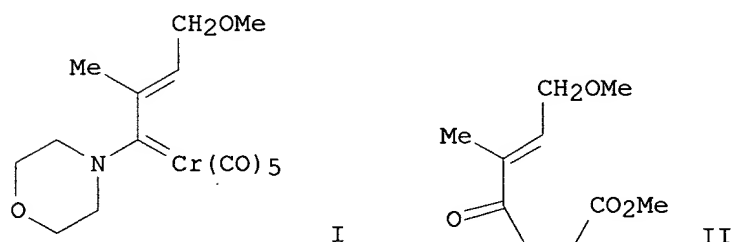
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C<sub>3</sub>RhN<sub>3</sub>RhC<sub>3</sub> chain  
AN 1999:673764 CAPLUS  
DN 132:23070  
TI Azide migration and azide bridging: preparation of metalated **acrylonitriles** and of dinuclear complexes containing an almost linear eleven-membered C<sub>3</sub>RhN<sub>3</sub>RhC<sub>3</sub> chain  
AU Laubender, Matthias; Werner, Helmut  
CS Institut fur Anorganische Chemie der Universitat, Wurzburg, D-97074, Germany  
SO Chemistry--A European Journal (1999), 5(10), 2937-2946  
CODEN: CEUJED; ISSN: 0947-6539  
PB Wiley-VCH Verlag GmbH  
DT Journal  
LA English  
OS CASREACT 132:23070  
AB Isoelectronic square-planar azido- and isocyanatorhodium (I) complexes trans-[RhX(:C:C:CRR')(PiPr<sub>3</sub>)<sub>2</sub>] (X = N<sub>3</sub>: 9-12; X = CNO: 13-16) were prepd. from the related chloro derivs. trans-[RhCl(:C:C:CRR')(PiPr<sub>3</sub>)<sub>2</sub>] by salt **metathesis**. A single-crystal x-ray diffraction study of 12 (R = Ph, R' = tBu) confirmed an almost linear arrangement of the Rh-C-C-C chain, but a significant bending of the Rh-N-N-N unit. In contrast to the isocyanato complexes 13-16, which are quite inert toward CO, the azido derivs. 9, 11 and 12 react with CO by migratory insertion of the allenylidene ligand into the Rh-N<sub>3</sub> bond. While the product obtained from 12 and CO, in which the N<sub>3</sub> substituent is linked to the .gamma.-C atom of the C<sub>3</sub> chain, is exceedingly stable, the corresponding species with R = R' = aryl are quite labile and rearrange to the metalated **acrylonitrile** compds. trans-[Rh(C(CN):CRR')(CO)(PiPr<sub>3</sub>)<sub>2</sub>] (19, 20)

by elimination of Me. The reactions of 19 and 20 (which was crystallog. characterized) with trifluoroacetic acid gave the corresponding **acrylonitriles**  $R'RC:CHCN$  in quant. yields. Treatment of the mononuclear compds. 9-12 with Meerwein's salt  $[Me_3O]BF_4$  gave dinuclear  $[(PiPr_3)_2(R'RC:C:C)Rh_2(\mu-1,3-N_3)]BF_4$  (21-24) contg. an almost linear eleven-membered  $C_3RhN_3RhC_3$  chain. The x-ray crystal structure anal. of 22 ( $R = Ph$ ,  $R' = o-Tol$ ) revealed that the conformations of the two halves of the cation are quite different and that the angle between the two metal-centered planes is  $56.5(1)^\circ$ .

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AN 1995:397673 CAPLUS  
DN 122:187739  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo  
CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain  
SO Organometallics (1995), 14(3), 1429-33  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 122:187739  
GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L31 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Methylene exchange reactions catalyzed by alkylidene derivatives of titanium and phosphorus  
AN 1981:423738 CAPLUS  
DN 95:23738  
TI Methylene exchange reactions catalyzed by alkylidene derivatives of titanium and phosphorus  
AU Klabunde, U.; Tebbe, F. N.; Parshall, G. W.; Harlow, R. L.  
CS Cent. Res. Dev. Dep., E. I. du Pont de Nemours and Co., Wilmington, DE, 19898, USA  
SO Journal of Molecular Catalysis (1980), 8(1-3), 37-51

CODEN: JMCADS; ISSN: 0304-5102

DT Journal

LA English

AB Although olefin **metathesis** is generally catalyzed by compds. of Mo, W, or Re, alkylidene derivs. of Ti and of P also catalyze CH<sub>2</sub> exchange between olefins, the so-called degenerate **metathesis** reaction. In contrast to the metal-based catalysts, the P-based catalysts are effective with olefins in which the C:C bond is conjugated with a functional group such as CN or CO<sub>2</sub>R. These new families of catalysts operate by an alkylidene-metallacycle mechanism like that for conventional olefin **metatheses**. The Ti system is used to study the individual steps in **metatheses** and to det. the role of the commonly used alkylaluminum cocatalyst. Titanacyclobutenes are isolated from the reactions of acetylenes with methylenetitanium complexes. The structures are detd. crystallog.

=> ruthenium or ru

74872 RUTHENIUM

20 RUTHENIUMS

74872 RUTHENIUM

(RUTHENIUM OR RUTHENIUMS)

57014 RU

185 RUS

57176 RU

(RU OR RUS)

L32 91812 RUTHENIUM OR RU

=> osmium or os

21403 OSMIUM

6 OSMIUMS

21405 OSMIUM

(OSMIUM OR OSMIUMS)

24377 OS

70 OSES

287 ORA

20 ORAS

13 OSAR

83 OSSA

24838 OS

(OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)

L33 35740 OSMIUM OR OS

=> l32 Or l33

MISSING OPERATOR L32 OR

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=> l32 or l33

L34 116120 L32 OR L33

=> d his

(FILE 'HOME' ENTERED AT 07:44:50 ON 28 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 07:47:16 ON 28 SEP 2003

ACT METATHESIS/L

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L1

STR

L2 (

7)SEA FILE=REGISTRY SSS SAM L1

L3 (

0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN

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7)SEA FILE=REGISTRY SSS SAM L1

L5 STR  
 L6 ( 1)SEA FILE=REGISTRY SSS SAM L5  
 L7 ( 2)SEA FILE=REGISTRY SSS FUL L5  
 L8 STR  
 L9 ( 14)SEA FILE=REGISTRY EXA FUL L8  
 L10 ( 334)SEA FILE=CAPLUS ABB=ON PLU=ON L9  
 L11 ( 157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
 L12 ( 0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS  
 L13 ( 11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
 L14 ( 2)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND L13  
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FILE 'CAPLUS' ENTERED AT 07:47:59 ON 28 SEP 2003

FILE 'REGISTRY' ENTERED AT 07:48:09 ON 28 SEP 2003

E 2-2-BUTENE/CN  
 E 2-METHYL-2-BUTENE/CN  
 L15 1 E3  
 E 2-METHYL-PROPENE/CN  
 E ISOBUTENE/CN  
 L16 1 E3  
 E PROPENE/CN  
 L17 1 E3

FILE 'CAPLUS' ENTERED AT 07:50:09 ON 28 SEP 2003

L18 428 L15/PREP  
 L19 13922 L16  
 L20 37158 L17  
 L21 3908 L19 AND L20  
 L22 60 L18 AND L21  
 L23 14436 CARBENE  
 L24 0 L22 AND L23  
 L25 11263 METATHESIS  
 L26 3 L22 AND L25  
 L27 82949 ACRYLONITRILE  
 L28 54 L13 AND L27  
 L29 145 CROWE  
 L30 0 L28 AND L29  
 L31 9 L23 AND L28  
 L32 91812 RUTHENIUM OR RU  
 L33 35740 OSMIUM OR OS  
 L34 116120 L32 OR L33

=> 134 and 128

L35 13 L34 AND L28

=> 135 not 131

L36 8 L35 NOT L31

=> d 136 1-8 ti fbib abs

L36 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI A highly efficient **ruthenium** catalyst for **metathesis** reactions

AN 2002:908270 CAPLUS

DN 138:254579

TI A highly efficient **ruthenium** catalyst for **metathesis** reactions

AU Grela, Karol; Harutyunyan, Syuzanna; Michrowska, Anna

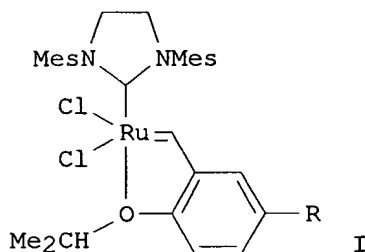
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01-224, Pol.

SO Angewandte Chemie, International Edition (2002), 41(21), 4038-4040



CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA  
DT Journal  
LA English  
OS CASREACT 138:254579  
GI



AB The **ruthenium** alkylidene precatalyst I (R = NO<sub>2</sub>, Mes = 2,4,6-trimethylphenyl), bearing an electron-withdrawing substituent, is more reactive than I (R = H, Br) in the cross **metathesis** (CM) of terminal alkenes, e.g., CH<sub>2</sub>:CHCH<sub>2</sub>CH<sub>2</sub>NTsCH<sub>2</sub>CH<sub>2</sub>CH:CH<sub>2</sub>. The cross **metathesis** of terminal alkenes and .alpha.,.beta.-unsatd. compds., e.g., Me<sub>3</sub>CSiMe<sub>2</sub>O(CH<sub>2</sub>)<sub>4</sub>CH:CH<sub>2</sub>, can also be performed at room temp. E.g., cross **metathesis** of Me<sub>3</sub>CSiMe<sub>2</sub>O(CH<sub>2</sub>)<sub>4</sub>CH:CH<sub>2</sub> and MeCOCH:CH<sub>2</sub> gave Me<sub>3</sub>CSiMe<sub>2</sub>O(CH<sub>2</sub>)<sub>4</sub>CH:CHCOMe (E:Z = 99:1). I (R = NO<sub>2</sub>, Mes = 2,4,6-trimethylphenyl) operates under very mild conditions and can be applied in various types of **metathesis** reactions (RCM, CM, enyne).

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of **acrylonitrile**

AN 2002:908269 CAPLUS

DN 138:153869

TI A practical and highly active **ruthenium**-based catalyst that effects the cross **metathesis** of **acrylonitrile**

AU Love, Jennifer A.; Morgan, John P.; Trnka, Tina M.; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratory of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA

SO Angewandte Chemie, International Edition (2002), 41(21), 4035-4037  
CODEN: ACIEF5; ISSN: 1433-7851

PB Wiley-VCH Verlag GmbH & Co. KGaA

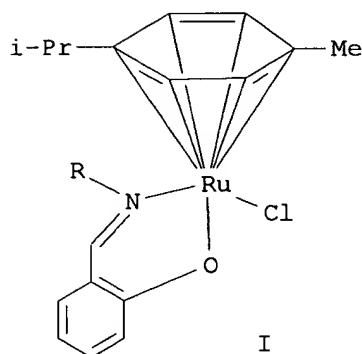
DT Journal

LA English

AB A series of **Ru**-based catalysts of general formula [(H<sub>2</sub>IMes)(Cl)<sub>2</sub>Ru(X)(A)] (A = benzylidene, salicylidene; X = PR<sub>3</sub> (R = Cy, Ph, p-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>), substituted (3-Br, 4-Ph) pyridines; H<sub>2</sub>IMes = 1,3-bis(2,4,6-trimethylphenyl)imidazolidin-2-yl) were tested on their efficiency in cross **metathesis** of **acrylonitrile** and allylbenzene. Catalyst [(H<sub>2</sub>IMes)(3-Br-py)<sub>2</sub>(Cl)<sub>2</sub>Ru=CHPh], prep'd. from [(H<sub>2</sub>IMes)(PCy<sub>3</sub>)(Cl)<sub>2</sub>Ru=CHPh] and 3-bromopyridine, exhibited best performance. ROMP of cyclooctadiene was also studied.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Ring-closing **metathesis**, Kharasch addition and enol ester  
 synthesis catalysed by a novel class of **ruthenium(II)** complexes  
 AN 2001:878871 CAPLUS  
 DN 136:294329  
 TI Ring-closing **metathesis**, Kharasch addition and enol ester  
 synthesis catalysed by a novel class of **ruthenium(II)** complexes  
 AU De Clercq, Bob; Verpoort, Francis  
 CS Department of Inorganic and Physical Chemistry, Ghent University, Ghent,  
 9000, Belg.  
 SO Tetrahedron Letters (2001), 42(51), 8959-8963  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 GI

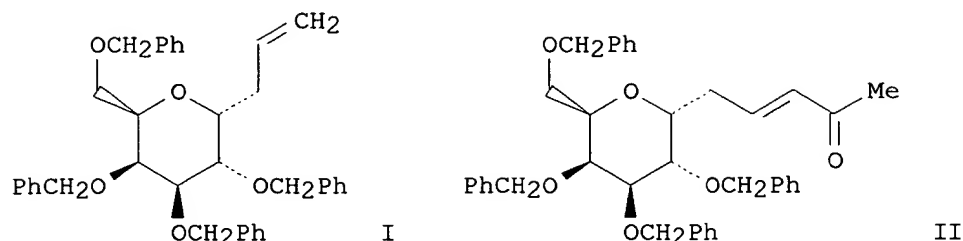


AB **Ruthenium** Schiff base complexes I (R = Me, t-Bu,  
 4-Br-2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>2</sub>) mediated the Kharasch addn. of CCl<sub>4</sub> across olefins with  
 high yields which markedly depended on the catalyst and the substrate  
 used. In addn., ring-closing **metathesis** of some representative  
 diolefins was carried out. The best catalytic system I (R =  
 4-Br-2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>2</sub>) is able to form tri- and tetrasubstituted double bond  
 products. Finally, dependent of the catalytic system and the reaction  
 conditions used, these systems can catalyze the stereoselective formation  
 of enol esters or enynes in excellent yields.

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Highly efficient and recyclable polymer-bound catalyst for olefin  
**metathesis** reactions  
 AN 2001:775809 CAPLUS  
 DN 136:183367  
 TI Highly efficient and recyclable polymer-bound catalyst for olefin  
**metathesis** reactions  
 AU Randl, Stefan; Buschmann, Nicole; Connon, Stephen J.; Blechert, Siegfried  
 CS Institut für Chemie, Technische Universität Berlin, Berlin, 10623, Germany  
 SO Synlett (2001), (10), 1547-1550  
 CODEN: SYNLES; ISSN: 0936-5214  
 PB Georg Thieme Verlag  
 DT Journal

LA English  
OS CASREACT 136:183367  
GI



AB Polymer-supported **ruthenium** isopropylphenylmethylidene catalysts contg. di(mesityl)imidazolidinylidene ligands have been prepd. as supported catalysts for the cross **metathesis** reactions of alkenes with electron deficient alkenes. While both supported catalysts gave high yields of ring-closing **metathesis** products when treated with diallylamine, the catalyst bound to Wang resin through the isopropoxyphenylmethylidene moiety gave cross-**metathesis** products with electron-deficient alkenes in significantly higher yields than the **ruthenium** catalyst bound to Merrifield resin through the di(mesityl)imidazolidinylidene ligand. The Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst is the first supported catalyst for the cross-**metathesis** of alkenes and electron-deficient alkenes; the catalyst is robust, recyclable, highly active, and is compatible with a wide variety of functional groups. The alkenes produced by cross-**metathesis** reactions in the presence of the supported **ruthenium** catalysts have (E)-stereo with the exception of those formed by cross-**metathesis** reactions with **acrylonitrile** (3:1 Z:E) and acrolein (nonstereoselective). E.g., the Wang-resin supported isopropoxyphenylmethylideneruthenium catalyst was added to a soln. of the perbenzylated D-glycero-L-galactotrideoxynonenitol I and Me vinyl ketone in methylene chloride; the mixt. was stirred for 4-43 h to give the oxopentenyl sugar II in 98% yield.

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN

TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols

AN 2001:746735 CAPLUS

DN 136:183531

TI Cross-**metathesis** reaction. Generation of highly functionalized olefins from unsaturated alcohols

AU Cossy, J.; BouzBouz, S.; Hoveyda, A. H.

CS Laboratoire de Chimie Organique, CNRS, Paris, 75231, Fr.

SO Journal of Organometallic Chemistry (2001), 634(2), 216-221

CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

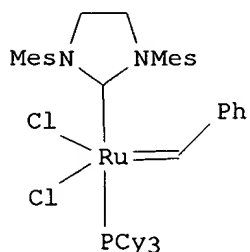
LA English

AB A cross-**metathesis** reaction was achieved between acid- and base-sensitive functionalized olefins and electron-deficient olefins or allylsilane by using a recyclable **ruthenium** catalyst at room temp. The cross-**metathesis** products are isolated in moderate to good yield. Ratios of E and Z cross-**metathesis** products depend

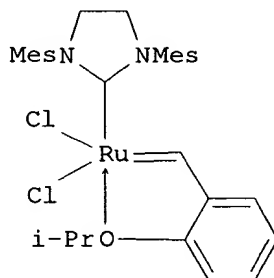
upon substituents on the electron-deficient coupling partner.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Highly selective cross **metathesis** with **acrylonitrile**  
using a phosphine free **Ru**-complex  
AN 2001:186459 CAPLUS  
DN 135:5692  
TI Highly selective cross **metathesis** with **acrylonitrile**  
using a phosphine free **Ru**-complex  
AU Randl, Stefan; Gessler, Simon; Wakamatsu, Hideaki; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin,  
10623, Germany  
SO Synlett (2001), (3), 430-432  
CODEN: SYNLES; ISSN: 0936-5214  
PB Georg Thieme Verlag  
DT Journal  
LA English  
OS CASREACT 135:5692  
GI



I



II

AB The exchange of the PCy3 ligand in complex I by an o-isopropylphenyl ether ligand leads to the extremely stable and highly selective initiator II for cross **metathesis** reactions. For the 1st time, **Ru**-catalyzed cross coupling with **acrylonitrile** can be performed in good yields.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Development of hydrogenated ring-opening **metathesis** polymers  
AN 2000:882375 CAPLUS  
DN 134:178919  
TI Development of hydrogenated ring-opening **metathesis** polymers  
AU Otsuki, Toshihiro; Goto, Kohei; Komiya, Zen  
CS Tsukuba Research Laboratories, JSR Corporation, Chiba, 299-0108, Japan  
SO Journal of Polymer Science, Part A: Polymer Chemistry (2000), 38(Suppl.),  
4661-4668  
CODEN: JPACEC; ISSN: 0887-624X  
PB John Wiley & Sons, Inc.  
DT Journal  
LA English  
AB New hydrogenated ring-opening **metathesis** polymers with excellent thermal and optical properties were developed. These polymers were prepd.

by the ring-opening **metathesis** polymn. of ester-substituted tetracyclododecene monomers followed by the hydrogenation of the main-chain double bond. The degree of hydrogenation was an important factor for the thermal stability of the polymers, and as complete hydrogenation as possible was necessary to obtain a thermally stable polymer. The completely hydrogenated ring-opening polymer derived from 8-methyl-8-methoxycarbonyl-substituted monomer has a glass-transition temp. of 171.degree. and a 5% wt.-loss temp. of 446.degree.. This polymer has excellent thermal and optical properties because of its bulky and unsym. polycyclic structure in the main chain and is an alternative to glass or other transparent polymers such as poly(Me methacrylate) and polycarbonate resin. This polymer has also been used in a wide variety of applications, such as optical lenses, optical disks, optical films, and optical fiber.

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Hydrogenation of ring-opening **metathesis** polymer with  
**ruthenium** catalysts  
AN 1998:687657 CAPLUS  
DN 130:4161  
TI Hydrogenation of ring-opening **metathesis** polymer with  
**ruthenium** catalysts  
AU Yoshida, Yoshinori; Yoshinari, Masashi; Iio, Akira; Komiya, Zen  
CS Tsukuba Research Laboratory, JSR Corporation, Tsukuba, 305-0841, Japan  
SO Polymer Journal (Tokyo) (1998), 30(10), 819-823  
CODEN: POLJB8; ISSN: 0032-3896  
PB Society of Polymer Science, Japan  
DT Journal  
LA English  
AB A ring-opening **metathesis** polymer (ROMP) of 8-methyl-8-methoxycarbonyltetracyclo[4.4.0.12,5.17,10]dodec-3-ene (I) was hydrogenated with homogeneous catalysts. Monohydrido or dihydrido **ruthenium**(II) complexes achieved high hydrogenation degree which gave thermally stable satd. ROMP of I. The kinetics of hydrogenation reactions in the presence of carbonylchlorohydridotris(triphenylphosphine) **ruthenium**, RuHCl(CO)(Ph<sub>3</sub>)<sub>3</sub>, were studied in detail and found to follow first-order kinetics to the concn. of double bonds. Apparent activation energy for the overall hydrogenation reaction detd. in the temp. range of 155-180.degree.C was smaller than that obsd. for the hydrogenation of **acrylonitrile**-butadiene copolymer by rhodium catalyst. The stirring rate did not affect hydrogenation reaction rate, although slower stirring lead to lower conversion at the very beginning of the reaction, indicating diffusion of hydrogen into the reaction media can be neglected if stirring is efficient. The concn. of RuHCl(CO)(Ph<sub>3</sub>)<sub>3</sub> also affected the reaction rate. The reaction rate leveled off at around 3 .times. 10<sup>-2</sup> mM reaching more than 4300 of turnover no.. Applying 100 kg cm<sup>-2</sup> of hydrogen at 160.degree.C in m-xylene, high hydrogenation degrees were achieved at **ruthenium** concn. as low as 20 ppm to the polymer.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	92.82	108.00
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.02	-13.02

=> save temp all metathesis/l

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preserved. You may then reenter the SAVE command with a different  
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REPLACE OLD DEFINITION? Y/(N):y

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For an explanation, enter "HELP LOGOFF".

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FULL ESTIMATED COST	93.24	108.42
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.02	-13.02

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NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective  
August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in  
September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in  
September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in  
September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in  
September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right  
Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
NEWS 20 SEP 29 DISSABS now available on STN  
  
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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
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PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methyl acrlate/cn

E1	1	METHYL ACONATE/CN
E2	1	METHYL ACRIDINE-2-CARBOXYLATE/CN
E3	0 -->	METHYL ACRLATE/CN
E4	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER/CN
E5	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E6	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP OLYMER/CN
E7	1	METHYL ACRYLATE/CN
E8	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E9	1	METHYL ACRYLATE DIANION/CN
E10	1	METHYL ACRYLATE DIMER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN

=> e methyl acrylate/cn

E1	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN
E2	1	METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP OLYMER/CN
E3	1 -->	METHYL ACRYLATE/CN
E4	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5	1	METHYL ACRYLATE DIANION/CN
E6	1	METHYL ACRYLATE DIMER/CN
E7	1	METHYL ACRYLATE HOMOPOLYMER/CN
E8	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9	1	METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10	1	METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PY RROLIDINE/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PYR IDINE/CN

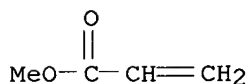
=> e3

L1 1 "METHYL ACRYLATE"/CN

=> d l1



L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 96-33-3 REGISTRY  
 CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Acrylic acid methyl ester (6CI, 8CI)  
 OTHER NAMES:  
 CN 2-Propenoic acid methyl ester  
 CN Methoxycarbonylethylene  
 CN **Methyl acrylate**  
 CN Methyl acrylic ester  
 CN Methyl prop-2-enoate  
 CN Methyl propenoate  
 CN NSC 24146  
 FS 3D CONCORD  
 DR 102256-29-1  
 MF C4 H6 O2  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM\*, DIPPR\*,  
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
 HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,  
 PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,  
 ULIDAT, USPAT2, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



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 11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
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=> file caplus

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=> l1/rct

11580 L1  
2558019 RCT/RL  
L2 7844 L1/RCT  
(L1 (L) RCT/RL)

=> metathesis

11216 METATHESIS  
159 METATHESES  
L3 11264 METATHESIS  
(METATHESIS OR METATHESES)

=> l2 and l3

L4 67 L2 AND L3

=> ruthenium and ru

74873 RUTHENIUM  
20 RUTHENIUMS  
74873 RUTHENIUM  
(RUTHENIUM OR RUTHENIUMS)  
57016 RU  
185 RUS  
57178 RU  
(RU OR RUS)  
L5 40237 RUTHENIUM AND RU

=> osmium or os

21403 OSMIUM  
6 OSMIUMS  
21405 OSMIUM  
(OSMIUM OR OSMIUMS)  
24377 OS  
70 OSES  
287 ORA  
20 ORAS  
13 OSAR  
83 OSSA  
24838 OS  
(OS OR OSES OR ORA OR ORAS OR OSAR OR OSSA)  
L6 35740 OSMIUM OR OS

=> l4 or l5

L7 40296 L4 OR L5

=> l4 and l7

L8 67 L4 AND L7

=> save temp l8 acrylmetath/a

ANSWER SET L8 HAS BEEN SAVED AS 'ACRYLMETATH/A'

=> d 18 57-67 ti

- L8 ANSWER 57 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Manganese Fischer carbene chemistry: reactions of  $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$  with enynes, 1-hexyne, and acrylates
- L8 ANSWER 58 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Enantioselective catalysis. VII. Complexes from  $[\text{P}(\text{R},\text{S}),3\text{R},4\text{R},\text{P}'(\text{R},\text{S})]-3,4$ -bis(phenylphosphino)pyrrolidine. Preparation of optically pure 1,2-bisphosphine ligands with four stereo centers containing additional functional groups
- L8 ANSWER 59 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Syntheses, reactions, and molecular structures of trans-hydrido(phenylamido)bis(triethylphosphine)platinum(II) and trans-hydridophenoxobis(triethylphosphine)platinum(II)
- L8 ANSWER 60 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Moldable **metathesis**-prepd. crosslinked halogen-containing copolymers
- L8 ANSWER 61 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Impact-resistant polyamide compositions
- L8 ANSWER 62 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Impact-resistant polyamide compositions
- L8 ANSWER 63 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Carbon-13 kinetic isotopic effect of the polymerization of monomers with multiple bonds
- L8 ANSWER 64 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Delayed gelation in the polymerization of cycloolefins
- L8 ANSWER 65 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Copolymers of norbornene-type cycloolefins
- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters
- L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of low-molecular-weight unsaturated acid esters

=> d 18 66,67 ti fbib abs

- L8 ANSWER 66 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters  
AN 1981:155949 CAPLUS  
DN 94:155949  
TI **Metathesis** of functionalized olefins: homogeneous cross-**metathesis** of cycloolefin and ethylenic esters  
AU Otton, J.; Colleuille, Y.; Varagnat, J.  
CS Cent. Rech. Carrieres, Rhone-Poulenc, Saint Fons, 69190, Fr.  
SO Journal of Molecular Catalysis (1980), 8(1-3), 313-24  
CODEN: JMCADS; ISSN: 0304-5102  
DT Journal  
LA English  
AB The factors (nature of the functional group, distance between the double bond and the functional group) governing the **metathesis** of

functionally substituted olefins were studied with the catalyst  $\text{WCl}_6/\text{Me}_4\text{Sn}$ . A new route to long-chain linear mono- and diesters was thus achieved through cross-**metathesis** between 2 easily available compds. (e.g., cyclooctene and Et 3-pentenoate). Arguments are presented concerning the initiation, propagation, and termination steps.

L8 ANSWER 67 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Metathesis** of low-molecular-weight unsaturated acid esters  
AN 1978:61950 CAPLUS  
DN 88:61950  
TI **Metathesis** of low-molecular-weight unsaturated acid esters  
AU Verkuijlen, E.; Dirks, R. J.; Boelhouwer, C.  
CS Inst. Chem. Technol., Univ. Amsterdam, Amsterdam, Neth.  
SO Recueil des Travaux Chimiques des Pays-Bas (1977), 96(11), 86-90  
CODEN: RTCPA3; ISSN: 0034-186X  
DT Journal  
LA English  
AB Unsatd. esters  $\text{RCH:CR}_1(\text{CH}_2)_n\text{CO}_2\text{Me}$  (I; R,  $\text{R}_1$ , n = octyl, H, 7; H, H, 0-2; Me, H, 1; Et, H, 0; Me, H or Me, 0; H, Me, 0) underwent both homometathesis and cometathesis with sym. alkenes in the presence of  $\text{WCl}_6\text{-SnMe}_4$  catalysts when n .gtoreq.1.  $\text{CH}_2\text{:CMeCO}_2\text{Me}$  showed low reactivity toward homometathesis but considerable activity toward cometathesis with 3-hexene; this is attributed to a preference for head-to-tail alignment in homometathesis.

=> d 18 46-56 ti

L8 ANSWER 46 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A direct, highly convergent route to .alpha.-methylene-.gamma.-lactones fused to medium and large rings

L8 ANSWER 47 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Carbynehydridoruthenium complexes as catalysts for the selective, ring-opening **metathesis** of cyclopentene with methyl acrylate

L8 ANSWER 48 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Arenediazonium tetrachlorocuprates(II). Modification of the Meerwein and Sandmeyer reactions

L8 ANSWER 49 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and characterization of d2 imido complexes of molybdenum. Crystal structure of  $[\text{MoCl}_2\{\text{N}(\text{mes})\}(\text{PhC.tplbond.CPh})(\text{PMe}_3)_2].\text{cntdot}.0.5\text{PhC.tplbond.CPh}$  (mes = 2,4,6-trimethylphenyl)

L8 ANSWER 50 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Divalent Palladium and Platinum Complexes Containing Rigid Bidentate Nitrogen Ligands and Electrochemistry of the Palladium Complexes

L8 ANSWER 51 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Difunctional telechelic linear non-crosslinked polyolefins

L8 ANSWER 52 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of linear monofunctional and telechelic difunctional polymers by olefin **metathesis** and ring-opening polymerization of cycloolefin

L8 ANSWER 53 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **metathesis** in preparation of linear monofunctional and telechelic difunctional polymers

L8 ANSWER 54 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reaction of the Coordinatively Unsaturated Methylene Complex  
 $\text{Ir:CH}_2[\text{N}(\text{SiMe}_2\text{CH}_2\text{PPh}_2)_2]$  with Olefins: Stereoselective Formation of Allyl  
 Hydride Derivatives

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

L8 ANSWER 56 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Reactions of coordinated ligands. XVIII. Template syntheses and  
 periphery reactions of macrocyclic multiphosphine ligands with functional  
 groups

=> d 18 55 ti fbib abs

L8 ANSWER 55 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AN 1995:397673 CAPLUS

DN 122:187739

TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes

AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo

CS Instituto Universitario de Quimica Organometalica Enrique Moles,  
 Universidad de Oviedo, Oviedo, 33071, Spain

SO Organometallics (1995), 14(3), 1429-33

CODEN: ORGND7; ISSN: 0276-7333

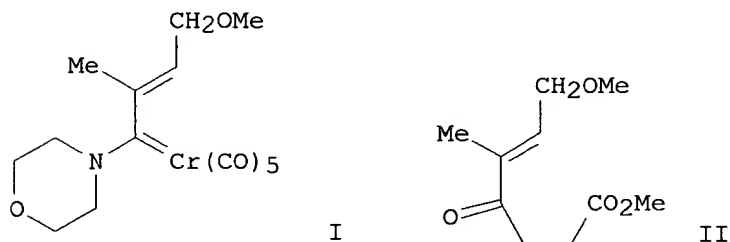
PB American Chemical Society

DT Journal

LA English

OS CASREACT 122:187739

GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type  
 vinylaminocarbenes, e.g., I, by the **metathesis** reaction of  
 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of  
 the vinylaminocarbenes with electron-deficient alkenes to afford, after  
 hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this  
 behavior, a cyclopropanation process was proposed.

=> d 18 35-45 ti

L8 ANSWER 35 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis and **metathesis** reactions of a phosphine-free  
 dihydroimidazole carbene **ruthenium** complex

L8 ANSWER 36 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI N-tri or di-alkylsilyl(perfluoroalkanesulfonyl)imide derivatives,  
 preparation and use as Lewis acid catalysts

L8 ANSWER 37 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI In Situ Preparation of a Highly Active N-Heterocyclic Carbene-Coordinated  
 Olefin **Metathesis** Catalyst

L8 ANSWER 38 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:  
 Potential Catalysts for Ring-Opening **Metathesis**

L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI A series of ruthenium(II) ester-carbene complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates

L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Synthesis of Functionalized Olefins by Cross and Ring-Closing  
**Metatheses**

L8 ANSWER 41 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Ferrocene-based phosphonite-phosphine ligands, Pd and Rh complexes

L8 ANSWER 42 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Application of Olefin Cross-**Metathesis** to Organometallics.  
 Synthesis of Unsaturated Ferrocenyl Alcohols and Ketones

L8 ANSWER 43 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes

L8 ANSWER 44 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Cationic ruthenium complexes, their production and their use

L8 ANSWER 45 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Cytotoxic Alkaloids Motuporamines A-C: Synthesis and Structural  
 Verification

=> d 18 39,40 ti fbib abs

L8 ANSWER 39 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI A series of ruthenium(II) ester-carbene complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates

AN 2000:443431 CAPLUS  
 DN 133:207970  
 TI A series of ruthenium(II) ester-carbene complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates

AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.  
 CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel  
 Beckman Laboratory of Chemical Synthesis, California Institute of  
 Technology, Pasadena, CA, 91125, USA  
 SO Tetrahedron Letters (2000), 41(24), 4689-4693  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB A series of ester-carbene complexes, Cl<sub>2</sub>(Cy<sub>3</sub>P)<sub>2</sub>Ru:CHZ (Z = CO<sub>2</sub>R, R = Me,  
 p-tolyl, t-Bu, iPr, cyclohexyl, 1-adamantyl, Ph), were synthesized. These  
 complexes were highly active for the **metathesis** of olefinic  
 substrates, including acrylates and trisubstituted olefins. In addn., the  
 ester-carbene moiety is thermodynamically high in energy. As a result,  
 these complexes react to ring-open cyclohexene by **metathesis** to

alleviate the thermodyn. strain of the ester-carbene ligand.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 67 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing  
**Metatheses**  
AN 2000:215112 CAPLUS  
DN 133:4435  
TI Synthesis of Functionalized Olefins by Cross and Ring-Closing  
**Metatheses**  
AU Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of  
Chemistry and Chemical Engineering, California Institute of Technology,  
Pasadena, CA, 91125, USA  
SO Journal of the American Chemical Society (2000), 122(15), 3783-3784  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:4435  
AB Functionalized olefins are prepd. by cross-**metathesis** and  
ring-closing **metathesis** of electron-deficient olefins employing  
a ruthenium alkylidene catalyst. The ruthenium catalyst was demonstrated  
to have high activity and functional group compatibility expanding the  
range of olefins that can participate in olefin **metathesis**  
reactions.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	37.88	44.39

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present

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 NEWS 5 Jul 21 Identification of STN records implemented  
 NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
 NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
 Right Truncation available  
 NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective  
 August 1, 2003  
 NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
 NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in  
 September 2003  
 NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in  
 September 2003  
 NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in  
 September 2003  
 NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in  
 September 2003  
 NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
 NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
 NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ  
 Truncation  
 NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
 NEWS 18 SEP 22 DIPPR file reloaded  
 NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
 NEWS 20 SEP 29 DISSABS now available on STN

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 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
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=> FIL STNGUIDE

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=> DIS SAVED

NAME	CREATED	NOTES/TITLE
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ACETALS	TEMP	26 L-NUMBERS
ACRYLMETATH/A	TEMP	67 ANSWERS IN FILE CAPLUS
ADAMANSRCH/L	TEMP	10 L-NUMBERS
ADAMANTPREP/A	TEMP	51 ANSWERS IN FILE CAPLUS
ADAMANTSP/A	TEMP	64 ANSWERS IN FILE CAPLUS
ALKYLATIN/L	13 DEC 2001	9 L-NUMBERS
CHLOROALA/A	TEMP	14 ANSWERS IN FILE CAPLUS
CYCLIZATN/L	TEMP	10 L-NUMBERS
ESTERODOR/L	05 SEP 2002	42 L-NUMBERS
GENRCACETALS/A	TEMP	148 ANSWERS IN FILE CAPLUS
HALOSM/A	TEMP	1890 ANSWERS IN FILE CAPLUS
INDIUMCL3/A	30 MAY 2001	1 ANSWER IN FILE REGISTRY
LTWENTAUGFOR/A	04 AUG 2001	72 ANSWERS IN FILE CAPLUS
MESEALA/A	TEMP	241 ANSWERS IN FILE CAPLUS
METATHESIS/L	TEMP	36 L-NUMBERS
NEOTAMECRYST/A	24 APR 2001	59 ANSWERS IN FILE CAPLUS
NOSEARCH/L	TEMP	18 L-NUMBERS
NVLARMFULGEN/A	19 APR 2001	196 ANSWERS IN FILE REGISTRY
POHBENZALDEH/A	10 JUL 2001	5519 ANSWERS IN FILE CAPLUS
PROSTACMPD15/A	01 AUG 2001	34 ANSWERS IN FILE CAPLUS
SELENOCMPDS/L	TEMP	13 L-NUMBERS
STILLEAPP/L	07 JAN 2002	17 L-NUMBERS
TWOAMINOPOLY/Q	16 APR 2001	UPLOADED STRUCTURE

=> DIS SAVED/S  
NO SAVED SDI REQUESTS

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FULL ESTIMATED COST	0.06	0.27

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> ACT ACRYLMETATH/A  
L1 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN  
L2 ( 7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT  
L3 ( 11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS

L4 ( 67)SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L3  
 L5 ( 40237)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM AND RU  
 L6 ( 40296)SEA FILE=CAPLUS ABB=ON PLU=ON L4 OR L5  
 L7 67 SEA FILE=CAPLUS ABB=ON PLU=ON L4 AND L6

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.69

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 26, 2003 (20030926/UP).

=> ACT METATHESIS/L

L8 STR  
 L9 ( 7)SEA FILE=REGISTRY SSS SAM L8  
 L10 ( 0)SEA FILE=REGISTRY ABB=ON PLU=ON DSCAN  
 L11 ( 7)SEA FILE=REGISTRY SSS SAM L8  
 L12 STR  
 L13 ( 1)SEA FILE=REGISTRY SSS SAM L12  
 L14 ( 2)SEA FILE=REGISTRY SSS FUL L12  
 L15 STR  
 L16 ( 14)SEA FILE=REGISTRY EXA FUL L15  
 L17 ( 334)SEA FILE=CAPLUS ABB=ON PLU=ON L16  
 L18 ( 157)SEA FILE=CAPLUS ABB=ON PLU=ON METHATHESIS  
 L19 ( 0)SEA FILE=CAPLUS ABB=ON PLU=ON METATHATHESIS  
 L20 ( 11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
 L21 ( 2)SEA FILE=CAPLUS ABB=ON PLU=ON L17 AND L20  
 L22 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON 2-METHYL-2-BUTENE/CN  
 L23 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON ISOBUTENE/CN  
 L24 ( 1)SEA FILE=REGISTRY ABB=ON PLU=ON PROPENE/CN  
 L25 ( 428)SEA FILE=CAPLUS ABB=ON PLU=ON L22/PREP  
 L26 ( 13922)SEA FILE=CAPLUS ABB=ON PLU=ON L23  
 L27 ( 37158)SEA FILE=CAPLUS ABB=ON PLU=ON L24  
 L28 ( 3908)SEA FILE=CAPLUS ABB=ON PLU=ON L26 AND L27  
 L29 ( 60)SEA FILE=CAPLUS ABB=ON PLU=ON L25 AND L28  
 L30 ( 14436)SEA FILE=CAPLUS ABB=ON PLU=ON CARBENE  
 L31 ( 0)SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L30  
 L32 ( 11263)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
 L33 ( 3)SEA FILE=CAPLUS ABB=ON PLU=ON L29 AND L32  
 L34 ( 82949)SEA FILE=CAPLUS ABB=ON PLU=ON ACRYLONITRILE  
 L35 ( 54)SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND L34  
 L36 ( 145)SEA FILE=CAPLUS ABB=ON PLU=ON CROWE  
 L37 ( 0)SEA FILE=CAPLUS ABB=ON PLU=ON L35 AND L36  
 L38 ( 9)SEA FILE=CAPLUS ABB=ON PLU=ON L30 AND L35  
 L39 ( 91812)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM OR RU  
 L40 ( 35740)SEA FILE=CAPLUS ABB=ON PLU=ON OSMIUM OR OS  
 L41 ( 116120)SEA FILE=CAPLUS ABB=ON PLU=ON L39 OR L40  
 L42 ( 13)SEA FILE=CAPLUS ABB=ON PLU=ON L41 AND L35  
 L43 ( 8)SEA FILE=CAPLUS ABB=ON PLU=ON L42 NOT L38

=> carbene

0 CARBENE  
 L44 0 CARBENE

=> file caplus

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FULL ESTIMATED COST

ENTRY  
0.12

SESSION  
0.81

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> carbene

12316 CARBENE  
7207 CARBENES  
L45 14441 CARBENE  
(CARBENE OR CARBENES)

=> 17 and 145

L46 16 L7 AND L45

=> d 146 1-16 ti

L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A good bargain: An inexpensive, air-stable ruthenium **metathesis** catalyst derived from .alpha.-asarone

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Product subclass 40: allylsilanes

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Preparation of ruthenium alkylidene complexes as catalysts for selective ring-opening cross-**metathesis** of cycloolefins with acrylates

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

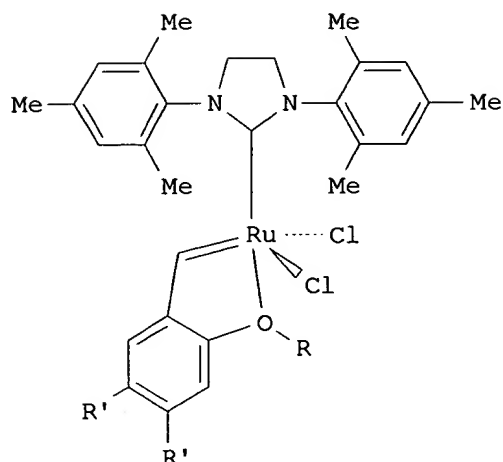
TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A tertiary phosphine that is too bulky: preparation of catalytically less

active **carbene** and vinylidene **ruthenium(II)** complexes

- L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene**  
Complexes
- L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and **metathesis** reactions of a phosphine-free  
dihydroimidazole **carbene ruthenium** complex
- L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**  
-Coordinated Olefin **Metathesis** Catalyst
- L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:  
Potential Catalysts for Ring-Opening **Metathesis**
- L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-**carbene** complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates
- L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes
- L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Cationic ruthenium complexes, their production and their use
- L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of  
2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes
- L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Manganese Fischer **carbene** chemistry: reactions of  
 $\text{Cp}'(\text{CO})_2\text{Mn}:\text{C}(\text{OMe}/\text{OLi})\text{R}$  with enynes, 1-hexyne, and acrylates
- => d l46 1-16 ti fbib abs
- L46 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis**  
catalyst derived from .alpha.-asarone  
AN 2003:246866 CAPLUS  
DN 139:85476  
TI A good bargain: An inexpensive, air-stable ruthenium **metathesis**  
catalyst derived from .alpha.-asarone  
AU Grela, Karol; Kim, Mikhail  
CS Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, 01224,  
Pol.  
SO European Journal of Organic Chemistry (2003), (6), 963-966  
CODEN: EJOCHF; ISSN: 1434-193X  
PB Wiley-VCH Verlag GmbH & Co. KGaA  
DT Journal  
LA English  
GI



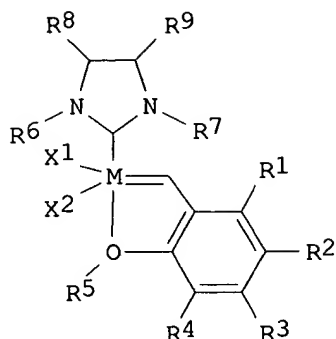
AB One-step synthesis of ruthenium **carbene** precatalyst (I) (R = CH<sub>3</sub>, R' = OCH<sub>3</sub>) from inexpensive .alpha.-asarone is described. This recyclable and easy to obtain complex I was used successfully in various types of **metathesis** reactions (RCM, CM, enyne) as a cheaper and more potent substitute of the Hoveyda-type precatalyst I (R = i-Pr, R' = H).

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts  
AN 2003:117835 CAPLUS  
DN 138:170361  
TI Preparation of novel transition-metal **carbene** complexes and their use as catalysts  
IN Blechert, Siegfried; Wakamatsu, Hideaki  
PA Bayer Aktiengesellschaft, Germany  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003011875	A1	20030213	WO 2002-EP8009	20020718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

DE 10137051 A1 20030220 DE 2001-10137051A 20010731  
DE 2001-10137051 20010731  
OS CASREACT 138:170361; MARPAT 138:170361  
GI



I

AB The invention relates to the prepn. of novel transition-metal complexes I (M = Group 8 transition metal, X1; X2 = anionic ligands; R1-R4 = H, C1-50 alkyl, cycloalkyl, cyano, halo, alkoxy, etc.; R5 = H, C1-50 cyclic or straight chain alkyl or aryl; R6, R7 = C1-30 cyclic or straight chain alkyl; R8, R9 = H, R8R9 = bond), intermediates in the prodn. thereof and the use as catalysts in org. reactions, in particular in **metathesis** reactions. Thus, CuCl mediated reaction of 2-isopropoxy-3-vinylbiphenyl (prepn. given) with tricyclohexylphosphine[1,3-bis(2,4,6-trimethylphenyl)-4,5-dihydroimidazol-2-ylidene][benzylidene]**ruthenium**(IV) dichloride in CH<sub>2</sub>Cl<sub>2</sub> gave title catalyst I (M = **Ru**, X1, X2 = Cl, R1-R3 = H, R4 = Ph, R5 = iPr, R6, R7 = mesityl, R8, R9 = H) which catalyzed cyclization of TsN(CH<sub>2</sub>CH:CH<sub>2</sub>)<sub>2</sub> to give N-tosyl-2,5-dihdropyrrole.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

AN 2003:45406 CAPLUS

DN 138:254985

TI Asymmetric Synthesis of Unusual Fused Tricyclic .beta.-Lactam Structures via Aza-Cycloadditions/Ring Closing **Metathesis**

AU Alcaide, Benito; Almendros, Pedro; Alonso, Jose M.; Redondo, Maria C.  
CS Departamento de Quimica Organica I, Facultad de Quimica, Universidad Complutense, Madrid, 28040, Spain

SO Journal of Organic Chemistry (2003), 68(4), 1426-1432  
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 138:254985

AB Conveniently substituted bis-.beta.-lactams, pyrrolidinyl-.beta.-lactams, and piperidinyl-.beta.-lactams undergo ring-closing **metathesis** using Grubbs' **carbene**, Cl<sub>2</sub>(Cy<sub>3</sub>P)2Ru:CHPh, to give medium-sized rings fused to bis-2-azetidinone, pyrrolidinyl-2-azetidinone, or piperidinyl-2-azetidinone systems. The diolefinic cyclization precursors can be obtained from optically pure 4-oxoazetidine-2-carbaldehydes bearing an extra alkene tether at position 1 or 3 of the .beta.-lactam ring via [2 + 2] cycloaddn. of imino 2-azetidinones, N-metalated azomethine ylide [3 + 2] cycloaddn., and subsequent N-acylation of the pyrrolidinyl nitrogen atom, or through aza-Diels-Alder cycloaddn. of 2-azetidinone-tethered imines. Under std. reaction conditions, the combination of cycloaddn.

reactions of 2-azetidinone-tethered imines with ring-closing  
**metathesis** offers an asym. entry to a variety of unusual fused  
tricyclic 2-azetidinones bearing two bridgehead nitrogen atoms.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Product subclass 40: allylsilanes  
AN 2002:863863 CAPLUS  
DN 139:53057  
TI Product subclass 40: allylsilanes  
AU Sarkar, T. K.  
CS Dept. of Chemistry, Indian Institute of Technology, Kharagpur, 721302,  
India  
SO Science of Synthesis (2002), 4, 837-925  
CODEN: SSCYJ9  
PB Georg Thieme Verlag  
DT Journal; General Review  
LA English  
AB A review of synthesis and reactions of allylsilanes. Covered reactions  
include couplings, condensations, eliminations, condensations,  
cycloaddns., redns., and cyclizations.

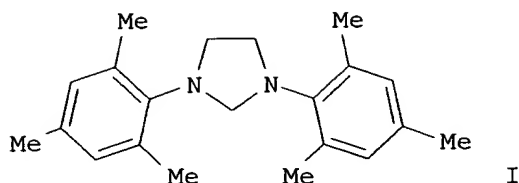
RE.CNT 325 THERE ARE 325 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation of ruthenium alkylidene complexes as catalysts for selective  
ring-opening cross-**metathesis** of cycloolefins with acrylates  
AN 2002:777865 CAPLUS  
DN 137:279309  
TI Preparation of ruthenium alkylidene complexes as catalysts for selective  
ring-opening cross-**metathesis** of cycloolefins with acrylates  
IN Morgan, John P.; Morrill, Christie; Grubbs, Robert H.; Choi, Tae-Lim  
PA California Institute of Technology, USA  
SO PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002079127	A1	20021010	WO 2002-US10395	20020401
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,				
TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
			US 2001-280601PP	20010330
US 2002198426	A1	20021226	US 2002-114674	20020401
			US 2001-280601PP	20010330

OS MARPAT 137:279309  
GI



AB A catalytic method is provided for a ring-opening cross-**metathesis** reaction between a cycloolefinic substrate and a second olefinic reactant, wherein the catalyst used is a transition metal alkylidene complex substituted with an N-heterocyclic **carbene** ligand. The substrates are selected so that the rate of the cross-**metathesis** reaction of the second olefinic reactant, kCM, is greater than or equal to the rate of the ring-opening **metathesis** reaction, kRo. In this way, the predominant ROCM product is a monomer, dimer, and/or oligomer, but not a polymer. The invention addnl. provides for selective prodn. of an end-differentiated olefinic product, using trisubstituted cycloolefins as substrates and/or a subsequent cross-**metathesis** reaction following an initial ROCM step. The cycloolefinic substrates include low-strain olefins such as cyclohexene as well as higher strain olefins such as cyclooctene. The predominant teaching involves the ring-opening cross-**metathesis** of cycloolefins with acroyl species in the presence of ruthenium alkylidene complex catalysts. In a typical example, 1,5-COD undergoes ROCM with Me acrylate in the presence of RuCl<sub>2</sub>(:CHPh)(IMesH<sub>2</sub>)(PCy<sub>3</sub>) (synthetic prepn. given) [IMesH<sub>2</sub> = (I)] to give 78% of the corresponding ring-opened **metathesis** dimer.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

AN 2002:10410 CAPLUS

DN 136:70246

TI Synthesis of functionalized and unfunctionalized olefins via cross and ring-closing **metathesis**

IN Grubbs, Robert H.; Chatterjee, Arnab K.; Morgan, John P.; Scholl, Matthias; Choi, Tae-lim

PA California Institute of Technology, USA

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002000590	A1	20020103	WO 2001-US20180	20010625
	W:				
	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				US 2000-213757PP	20000623
	US 2002137978	A1	20020926	US 2001-891144	20010625
				US 2000-213757PP	20000623



EP 1301458

A1 20030416

EP 2001-950437 20010625

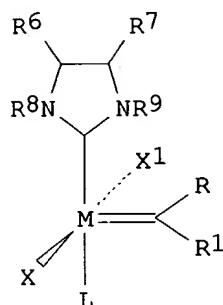
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-213757PP 20000623

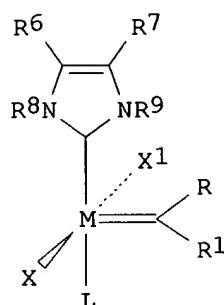
WO 2001-US20180W 20010625

OS MARPAT 136:70246

GI



I



II

AB The cross-**metathesis** and ring-closing **metathesis** reactions between geminal disubstituted olefins and terminal olefins, use a **Ru** or **Os** metal **carbene** complex **metathesis** catalyst. Specifically, .alpha.-functionalized or unfunctionalized olefins are made via intermol. cross-**metathesis** and intramol. ring-closing **metathesis** using a **Ru** alkylidene complex. The catalysts have structures (I) or (II) (M = **Ru** or **Os**; X, X1 = anionic ligand; L = neutral electron donor ligand; and, R, R1, R6, R7, R8, and R9 = H or a substituent selected from C1-C20 alkyl, C2-C20 alkenyl, C2-C20 alkynyl, aryl, C1-C20 carboxylate, C1-C20 alkoxy, C2-C20 alkenyloxy, C2-C20 alkynyloxy, aryloxy, C2-C20 alkoxy carbonyl, C1-C20 alkylthio, C1-C20 alkylsulfonyl and C1-C20 alkylsulfinyl).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN

TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium**(II) complexes

AN 2001:925827 CAPLUS

DN 136:294927

TI A tertiary phosphine that is too bulky: preparation of catalytically less active **carbene** and vinylidene **ruthenium**(II) complexes

AU Stuer, Wolfram; Wolf, Justin; Werner, Helmut

CS Institut fur Anorganische Chemie, Universitat Wurzburg, Wurzburg, D-97074, Germany

SO Journal of Organometallic Chemistry (2002), 641(1-2), 203-207  
CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

LA English

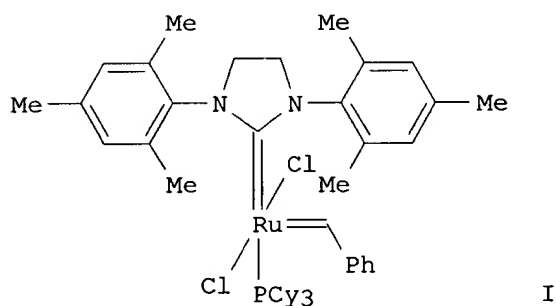
OS CASREACT 136:294927

AB Tricyclooctylphosphine PCoc3 (1), which was prepd. from PCl3 and cyclooctyl Grignard reagent, reacts under an atm. of H2 with the dimer [RuCl2(.eta.3:.eta.3-ClOH16)]2 (2) to give the hydrido(dihydrogen) complex [RuHCl(H2)(PCoc3)2] (4); in contrast, treatment of 2 with PPh3 under the same conditions affords [RuHCl(PPh3)3] (3). The reaction of 4 with

acetylene in the presence of  $\text{MgCl}_2$  and  $\text{H}_2\text{O}$  gives the **Ru carbene**  $[\text{RuCl}_2(\text{:CHCH}_3)(\text{PCoc}_3)_2]$  (5) in 70% isolated yield. In the absence of  $\text{MgCl}_2$  and  $\text{H}_2\text{O}$ , 4 reacts with acetylene at low temp. to give the hydrido(vinylidene) complex  $[\text{RuHCl}(\text{:C:CH}_2)(\text{PCoc}_3)_2]$  (6) almost quant. Compds. 5, 6 and  $[\text{RuH}(\text{:C:CH}_2)(\text{PCoc}_3)_2]$  (7), the latter being obtained from 6 and  $\text{CF}_3\text{CO}_2\text{K}$  by ligand exchange, are poor catalysts for ROMP and cross olefin **metathesis**.

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene** Complexes  
AN 2001:699173 CAPLUS  
DN 136:19856  
TI Olefin **Metathesis** Involving Ruthenium Enoic **Carbene** Complexes  
AU Choi, Tae-Lim; Lee, Choon Woo; Chatterjee, Arnab K.; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA  
SO Journal of the American Chemical Society (2001), 123(42), 10417-10418  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 136:19856  
GI



AB Unsatd. diesters and diketones were prepd. stereoselectively in 41-99% yields by olefin **metathesis** of acrylate esters and .alpha.,.beta.-unsatd. ketones in the presence of ruthenium **carbene** catalyst I (Cy = cyclohexyl). Ruthenium **carbene** complexes contg. carbonylmethylene groups are formed in situ as the active **metathesis** catalysts. Acrylates undergo **metathesis** in the presence of I at concns. of 0.40M, while unsatd. ketones undergo **metathesis** at concn. of 0.05M; acrylate-derived ruthenium **carbene** complexes were not as stable and required higher concns. of alkene to form catalytic effective concns. of alkoxy carbonylmethylene ruthenium complexes, while the **carbene** complexes derived from unsatd. ketones were more stable and required lower concns. of reactants to generate catalytically active concns. of ruthenium enoic **carbene** catalysts. Both acrylates and .alpha.,.beta.-unsatd. ketones underwent ring-opening cross-**metathesis** reactions with

cyclohexene and cross-**metathesis** reactions with 2-methyl-1-hexene and methylenecyclohexane to give unsym. substituted products. The use of the imidazolidinylideneruthenium catalyst stabilizes electron-withdrawing ruthenium **carbene** moieties and allows **metathesis** reactions with acrylates and .alpha.,.beta.-unsatd. ketones to proceed in high yields.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex  
AN 2000:872572 CAPLUS  
DN 134:207942  
TI Synthesis and **metathesis** reactions of a phosphine-free dihydroimidazole **carbene ruthenium** complex  
AU Gessler, Simon; Randl, Stefan; Blechert, Siegfried  
CS Institut fur Organische Chemie, Technische Universitat Berlin, Berlin, D-10623, Germany  
SO Tetrahedron Letters (2000), 41(51), 9973-9976  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB Synthesis and activity in ring closure **metathesis** (RCM) and cross **metathesis** (CM) of the phosphine-free 1,3-dimesityl-2-imidazolidinylidene (IHMe)s **Ru** alkoxybenzylidene complex ([RuCl<sub>2</sub>(IHMe)s(2-*i*PrOC<sub>6</sub>H<sub>4</sub>CH)])) are reported. The activities of the above complex and [RuCl<sub>2</sub>(PCy<sub>3</sub>)(CHPh)(IHMe)s] were compared.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst  
AN 2000:621214 CAPLUS  
DN 133:349821  
TI In Situ Preparation of a Highly Active N-Heterocyclic **Carbene**-Coordinated Olefin **Metathesis** Catalyst  
AU Morgan, John P.; Grubbs, Robert H.  
CS Arnold and Mabel Beckman Laboratories for Chemical Synthesis, California Institute of Technology, Pasadena, CA, 91125, USA  
SO Organic Letters (2000), 2(20), 3153-3155  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:349821  
AB Highly active N-heterocyclic **carbene**-coordinated catalysts may be synthesized and used in situ, without requiring prior isolation of the catalyst. Activation of this in situ catalyst with ethereal HCl dramatically reduces the reaction times required for high conversions. A variety of .alpha.,.beta.-unsatd. carbonyl-contg. substrates participate readily in cross and ring-closing **metathesis** reactions using this prepn.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes: Potential Catalysts for Ring-Opening **Metathesis**  
AN 2000:607751 CAPLUS

DN 133:335320  
TI Water-Soluble **Ruthenium** Vinylidene and Allenylidene Complexes:  
Potential Catalysts for Ring-Opening **Metathesis**  
AU Saoud, Mustapha; Romerosa, Antonio; Peruzzini, Maurizio  
CS Area de Quimica Inorganica, Universidad de Almeria, Almeria, 04071, Spain  
SO Organometallics (2000), 19(20), 4005-4007  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 133:335320  
AB Reaction of the water-sol. **Ru** complex  
[[RuCl<sub>2</sub>(TPPMS)<sub>2</sub>Na<sub>2</sub>]<sub>2</sub>·4H<sub>2</sub>O with phenylacetylene and  
diphenylpropargyl alc. in THF at room temp. gave the water-sol. unsatd.  
**carbenes** [[RuCl<sub>2</sub>(C:CHPh)(TPPMS)<sub>2</sub>]]Na<sub>2</sub> and [[RuCl(.mu.-  
Cl)(C:C:CPh<sub>2</sub>)(TPPMS)<sub>2</sub>]]Na<sub>4</sub>, resp. The ability of these complexes, which  
represent the 1st examples of water-sol. vinylidenes and allenylidenes, to  
catalyze the ring-opening **metathesis** of cyclic olefins with Me  
acrylate as chain transfer reagents is briefly discussed.  
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A series of ruthenium(II) ester-**carbene** complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates  
AN 2000:443431 CAPLUS  
DN 133:207970  
TI A series of ruthenium(II) ester-**carbene** complexes as olefin  
**metathesis** initiators: **metathesis** of acrylates  
AU Ulman, M.; Belderrain, T. R.; Grubbs, R. H.  
CS Division of Chemistry and Chemical Engineering, The Arnold and Mabel  
Beckman Laboratory of Chemical Synthesis, California Institute of  
Technology, Pasadena, CA, 91125, USA  
SO Tetrahedron Letters (2000), 41(24), 4689-4693  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB A series of ester-**carbene** complexes, Cl<sub>2</sub>(Cy<sub>3</sub>P)<sub>2</sub>Ru:CHZ (Z = CO<sub>2</sub>R,  
R = Me, p-tolyl, t-Bu, iPr, cyclohexyl, 1-adamantyl, Ph), were  
synthesized. These complexes were highly active for the  
**metathesis** of olefinic substrates; including acrylates and  
trisubstituted olefins. In addn., the ester-**carbene** moiety is  
thermodynamically high in energy. As a result, these complexes react to  
ring-open cyclohexene by **metathesis** to alleviate the thermodyn.  
strain of the ester-**carbene** ligand.  
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes  
AN 1999:757384 CAPLUS  
DN 132:93445  
TI Imine-Enamine Tautomeric Equilibrium of Palladium Imidoyl Complexes  
AU Campora, Juan; Hudson, Sarah A.; Massiot, Philippe; Maya, Celia M.; Palma,  
Pilar; Carmona, Ernesto; Martinez-Cruz, Luis A.; Vegas, Angel  
CS Departamento de Quimica Inorganica-Instituto de Investigaciones Quimicas,  
Universidad de Sevilla-Consejo Superior de Investigaciones Cientificas,  
Seville, 41092, Spain  
SO Organometallics (1999), 18(25), 5225-5237  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society

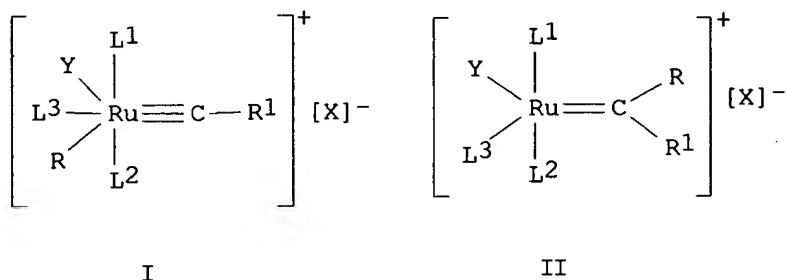
DT Journal  
 LA English  
 OS CASREACT 132:93445  
 AB The reaction of benzylpalladium complexes trans-[Pd(CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>]  
 (2) with isocyanides yields imidoyl complexes that exist in soln. as  
 equil. mixts. of the corresponding imine ([Pd(C(:NR')CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>],  
 3-im) and enamine ([Pd(C(NHR'):CHC<sub>6</sub>H<sub>4</sub>Z)(X)(PR<sub>3</sub>)<sub>2</sub>], 3-en) tautomers. While  
 the equil. const. is markedly affected by the electronic effect exerted by  
 the substituents at the Ph ring (Z), the effect of the metal fragment is  
 less pronounced and is dominated by steric factors. Both tautomeric forms  
 can also be found in the solid state, and the x-ray structures of  
 complexes of type 2, 3-im, and 3-en were detd.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Cationic ruthenium complexes, their production and their use  
 AN 1999:736714 CAPLUS  
 DN 131:337174  
 TI Cationic ruthenium complexes, their production and their use  
 IN Schwab, Peter; Schulz, Michael; Wolf, Justin; Stuer, Wolfram; Werner,  
 Helmut  
 PA BASF Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9958538	A1	19991118	WO 1999-EP2992	19990503
	W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19820652	A1	19991111	DE 1998-19820652A	19980508
	AU 9939301	A1	19991129	DE 1998-19820652	19980508
				AU 1999-39301	19990503
				DE 1998-19820652A	19980508
	EP 1075482	A1	20010214	WO 1999-EP2992 W	19990503
	EP 1075482	B1	20020403	EP 1999-922156	19990503
	R: BE, CH, DE, FR, GB, IT, LI, NL				
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	JP 2002514651	T2	20020521	JP 2000-548342	19990503
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503
	US 6500975	B1	20021231	US 2000-674536	20001102
				DE 1998-19820652A	19980508
				WO 1999-EP2992 W	19990503

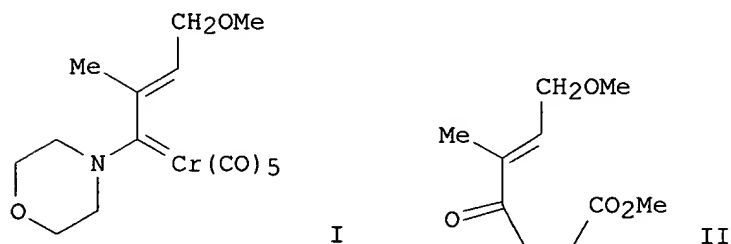
OS MARPAT 131:337174  
 GI



AB The invention relates to cationic ruthenium complexes I and II or mixts. contg. same, where II can be stabilized by a further ligand L4 and X is an anion which is not or weakly coordinated to the metal center; Y is a monodentate or multidentate anionic ligand; R and R' each independently of each other are hydrogen or a possibly substituted C1-20 alkyl-, C6-20-aryl-, or C7-20 alkylaryl rest; and L1, L2, L3 and L4 independently of each other are neutral electron donor ligands. Thus, reaction of  $[\text{RuCl}_2(\text{C}_8\text{H}_{12})]_n$  with tricyclohexylphosphine in 2-butanol in the presence of hydrogen gave 75%  $\text{RuHCl}(\text{H}_2)(\text{PCy}_3)_2$  which on treatment with acetylene gave  $\text{RuHCl}(:\text{C}:\text{CH}_2)(\text{PCy}_3)_2$ . Treatment of  $\text{RuHCl}(:\text{C}:\text{CH}_2)(\text{PCy}_3)_2$  with  $[\text{PhNMe}_2\text{H}][\text{B}(\text{C}_6\text{F}_5)_4]$  in  $\text{CH}_2\text{Cl}_2$  gave catalyst  $[\text{RuClH}(\text{.tplbond.CMe})(\text{NMe}_2\text{Ph})(\text{PCy}_3)_2][\text{B}(\text{C}_6\text{F}_5)_4]$  (I). The catalytic activity of I for ring opening **metathesis** polymn. of cyclooctene and ring opening **metathesis** of cyclopentene with Me acrylate is described.

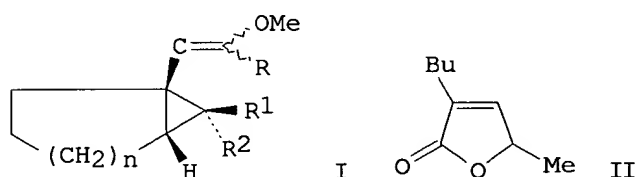
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AN 1995:397673 CAPLUS  
DN 122:187739  
TI Vinylaminocarbenes of Group 6 Metals by **Metathesis** Reaction of 2-Amino-1,3-butadienes. Reactivity toward Electron-Deficient Alkenes  
AU Barluenga, Jose; Aznar, Fernando; Martin, Alfredo  
CS Instituto Universitario de Quimica Organometalica Enrique Moles, Universidad de Oviedo, Oviedo, 33071, Spain  
SO Organometallics (1995), 14(3), 1429-33  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 122:187739  
GI



AB A new method for the synthesis of Cr, Mo, and W Fischer-type vinylaminocarbenes, e.g., I, by the **metathesis** reaction of 2-amino-1,3-butadienes and phenyloxycarbenes is reported. The reaction of the vinylaminocarbenes with electron-deficient alkenes to afford, after hydrolysis, the vinyl ketones, e.g., II, was studied. To explain this behavior, a cyclopropanation process was proposed.

L46 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Manganese Fischer **carbene** chemistry: reactions of  
 Cp'(CO)<sub>2</sub>Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates  
 AN 1991:23434 CAPLUS  
 DN 114:23434  
 TI Manganese Fischer **carbene** chemistry: reactions of  
 Cp'(CO)<sub>2</sub>Mn:C(OMe/OLi)R with enynes, 1-hexyne, and acrylates  
 AU Hoyer, Thomas R.; Rehberg, Gretchen M.  
 CS Dep. Chem., Univ. Minnesota, Minneapolis, MN, 55455, USA  
 SO Organometallics (1990), 9(12), 3014-15  
 CODEN: ORGND7; ISSN: 0276-7333  
 DT Journal  
 LA English  
 OS CASREACT 114:23434  
 GI



AB Cp'(CO)<sub>2</sub>Mn:C(OMe)R (Cp' = C<sub>5</sub>H<sub>4</sub>Me; R = Me, Ph) were treated with HC.tplbond.CCH<sub>2</sub>C(CO<sub>2</sub>Me)<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>CH:CR<sub>1</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> = H, Me; n = 1,2) to give bicyclic vinylcyclopropanes I as a mixt. of E- and Z-enol ethers which hydrolyzed upon standing in air to the cyclopropyl ketones. There was no evidence for cyclobutanone, furan or **metathesis** products from these reactions which shows that CO insertion into vinylogous **carbene** intermediates to generate ketene complexes is disfavored relative to internal cyclopropanation. Reaction of Cp'(CO)<sub>3</sub>Mn with MeLi to generate Cp'(CO)<sub>2</sub>Mn:C(OLi)Me and reaction with BuC.tplbond.CH generated butenolide II in a manner analogous to that obsd. for the acyl(pentacarbonyl)chromate species. The in situ reaction of Cp'(CO)<sub>2</sub>Mn:C(OLi)Me with R<sub>3</sub>CH:CR<sub>4</sub>CO<sub>2</sub>Me (R<sub>3</sub>, R<sub>4</sub> = H, Me) gave AcCHR<sub>3</sub>CHR<sub>4</sub>CO<sub>2</sub>Me which are formally the products of the addn of an acetyl anion in a Michael fashion to the enoates.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	48.99	49.80
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-10.42	-10.42

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LOGINID:SSSPTA1623PAZ

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
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FULL ESTIMATED COST	48.99	49.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.42	-10.42

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	48.99	49.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.42	-10.42

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STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6  
DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> me methyl acrylate/cn  
L47 0 ME METHYL ACRYLATE/CN

=> e methyl acrylate/cn  
E1 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER HOMOPOLYMER/CN  
E2 1 METHYL ACRYLAMIDOGLYCOLATE METHYL ETHER-VINYLPYRROLIDONE COP



OLYMER/CN

E3	1	--> METHYL ACRYLATE/CN
E4	1	METHYL ACRYLATE COMPOUND WITH METHYL LINOLATE (1:1)/CN
E5	1	METHYL ACRYLATE DIANION/CN
E6	1	METHYL ACRYLATE DIMER/CN
E7	1	METHYL ACRYLATE HOMOPOLYMER/CN
E8	1	METHYL ACRYLATE HOMOPOLYMER DOCOSYL ESTER/CN
E9	1	METHYL ACRYLATE HOMOPOLYMER DODECYL ESTER/CN
E10	1	METHYL ACRYLATE HOMOPOLYMER EICOSYL ESTER/CN
E11	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 1-(2-HYDROXYETHYL) PYRROLIDINE/CN
E12	1	METHYL ACRYLATE HOMOPOLYMER ESTER WITH 2-(2-HYDROXYETHYL) PYRROLIDINE/CN

=> e3

L48 1 "METHYL ACRYLATE"/CN

=> d 148

L48 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 96-33-3 REGISTRY

CN 2-Propenoic acid, methyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Acrylic acid methyl ester (6CI, 8CI)

OTHER NAMES:

CN 2-Propenoic acid methyl ester

CN Methoxycarbonylethylene

CN **Methyl acrylate**

CN Methyl acrylic ester

CN Methyl prop-2-enoate

CN Methyl propenoate

CN NSC 24146

FS 3D CONCORD

DR 102256-29-1

MF C4 H6 O2

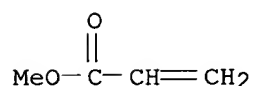
CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DETHERM\*, DIPPR\*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11557 REFERENCES IN FILE CA (1907 TO DATE)

835 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

11577 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=&gt; e 1-hexene/cn

E1 1 1-HEXEN-6-YL ACRYLATE/CN  
 E2 1 1-HEXEN-6-YL METHACRYLATE/CN  
 E3 1 --> 1-HEXENE/CN  
 E4 1 1-HEXENE CARBONATE/CN  
 E5 1 1-HEXENE COMPOUND WITH IODINE (1:1)/CN  
 E6 1 1-HEXENE COMPOUND WITH IODINE CHLORIDE (ICL) (1:1)/CN  
 E7 1 1-HEXENE DIMER/CN  
 E8 1 1-HEXENE EPOXIDE/CN  
 E9 1 1-HEXENE OXIDE/CN  
 E10 1 1-HEXENE OXIDE-D-LACTIDE-L-LACTIDE-PROPYLENE GLYCOL-PYROMELL  
 ITIC DIANHYDRIDE COPOLYMER/CN  
 E11 1 1-HEXENE OXIDE-METHYL 4,5-EPOXYPENTANOATE COPOLYMER/CN  
 E12 1 1-HEXENE OXIDE-METHYL 7,8-EPOXYOCTANOATE COPOLYMER/CN

=&gt; e3

L49 1 1-HEXENE/CN

=&gt; d 149

L49 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 592-41-6 REGISTRY

CN 1-Hexene (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-n-Hexene

CN Dialen 6

CN Hexene

CN NSC 74121

FS 3D CONCORD

DR 153522-12-4, 33004-04-5

MF C6 H12

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DETHERM\*, DIPPR\*,  
 EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*,  
 HSDB\*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*,  
 PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,  
 USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

 $\text{H}_2\text{C}=\text{CH}-\text{Bu}-\text{n}$ 

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9492 REFERENCES IN FILE CA (1907 TO DATE)

147 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

9500 REFERENCES IN FILE CAPLUS (1907 TO DATE)

6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=&gt; file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY      SESSION  
16.82      66.62

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE      TOTAL  
ENTRY      SESSION  
0.00      -10.42

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 148

L50      11583 L48

=> 149

L51      9503 L49

=> 150 and 151

L52      228 L50 AND L51

=> d his

(FILE 'HOME' ENTERED AT 06:25:35 ON 30 SEP 2003)

FILE 'STNGUIDE' ENTERED AT 06:25:47 ON 30 SEP 2003

FILE 'CAPLUS' ENTERED AT 06:26:34 ON 30 SEP 2003

ACT ACRYLMETATH/A

-----  
L1 (      1)SEA FILE=REGISTRY ABB=ON PLU=ON "METHYL ACRYLATE"/CN  
L2 (      7844)SEA FILE=CAPLUS ABB=ON PLU=ON L1/RCT  
L3 (      11264)SEA FILE=CAPLUS ABB=ON PLU=ON METATHESIS  
L4 (      67)SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND L3  
L5 (      40237)SEA FILE=CAPLUS ABB=ON PLU=ON RUTHENIUM AND RU  
L6 (      40296)SEA FILE=CAPLUS ABB=ON PLU=ON L4 OR L5  
L7      67 SEA FILE=CAPLUS ABB=ON PLU=ON L4 AND L6  
-----

FILE 'STNGUIDE' ENTERED AT 06:26:36 ON 30 SEP 2003

ACT METATHESIS/L

-----  
L8      STR

L9 (      7)SEA FILE=REGISTRY SSS SAM L8

```

L10 (      0)SEA FILE=REGISTRY ABB=ON  PLU=ON  DSCAN
L11 (      7)SEA FILE=REGISTRY SSS SAM L8
L12      STR
L13 (      1)SEA FILE=REGISTRY SSS SAM L12
L14 (      2)SEA FILE=REGISTRY SSS FUL L12
L15      STR
L16 (     14)SEA FILE=REGISTRY EXA FUL L15
L17 (    334)SEA FILE=CAPLUS ABB=ON  PLU=ON  L16
L18 (    157)SEA FILE=CAPLUS ABB=ON  PLU=ON  METHATHESIS
L19 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHATHESIS
L20 (   11263)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHESIS
L21 (      2)SEA FILE=CAPLUS ABB=ON  PLU=ON  L17 AND L20
L22 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  2-METHYL-2-BUTENE/CN
L23 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  ISOBUTENE/CN
L24 (      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PROPENE/CN
L25 (    428)SEA FILE=CAPLUS ABB=ON  PLU=ON  L22/PREP
L26 (   13922)SEA FILE=CAPLUS ABB=ON  PLU=ON  L23
L27 (   37158)SEA FILE=CAPLUS ABB=ON  PLU=ON  L24
L28 (    3908)SEA FILE=CAPLUS ABB=ON  PLU=ON  L26 AND L27
L29 (     60)SEA FILE=CAPLUS ABB=ON  PLU=ON  L25 AND L28
L30 (   14436)SEA FILE=CAPLUS ABB=ON  PLU=ON  CARBENE
L31 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  L29 AND L30
L32 (   11263)SEA FILE=CAPLUS ABB=ON  PLU=ON  METATHESIS
L33 (      3)SEA FILE=CAPLUS ABB=ON  PLU=ON  L29 AND L32
L34 (   82949)SEA FILE=CAPLUS ABB=ON  PLU=ON  ACRYLONITRILE
L35 (     54)SEA FILE=CAPLUS ABB=ON  PLU=ON  L20 AND L34
L36 (    145)SEA FILE=CAPLUS ABB=ON  PLU=ON  CROWE
L37 (      0)SEA FILE=CAPLUS ABB=ON  PLU=ON  L35 AND L36
L38 (      9)SEA FILE=CAPLUS ABB=ON  PLU=ON  L30 AND L35
L39 (   91812)SEA FILE=CAPLUS ABB=ON  PLU=ON  RUTHENIUM OR RU
L40 (   35740)SEA FILE=CAPLUS ABB=ON  PLU=ON  OSMIUM OR OS
L41 (  116120)SEA FILE=CAPLUS ABB=ON  PLU=ON  L39 OR L40
L42 (     13)SEA FILE=CAPLUS ABB=ON  PLU=ON  L41 AND L35
L43 (      8)SEA FILE=CAPLUS ABB=ON  PLU=ON  L42 NOT L38

```

```

L44      -----
      0 CARBENE

```

FILE 'CAPLUS' ENTERED AT 06:27:33 ON 30 SEP 2003

```

L45      14441 CARBENE
L46      16 L7 AND L45

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FILE 'REGISTRY' ENTERED AT 07:20:49 ON 30 SEP 2003

```

L47      0 ME METHYL ACRYLATE/CN
      E METHYL ACRYLATE/CN
L48      1 E3
      E 1-HEXENE/CN
L49      1 E3

```

FILE 'CAPLUS' ENTERED AT 07:22:01 ON 30 SEP 2003

```

L50      11583 L48
L51      9503 L49
L52      228 L50 AND L51

```

=> 120 and 152

```

      11220 METATHESIS
      159 METATHESES
      11268 METATHESIS
      (METATHESIS OR METATHESES)

```

```

L53      1 L20 AND L52

```

=> d 153 ti fbib abs

L53 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Synthesis and application of novel catalytically active polymers  
 containing 1,4,7-triazacyclononanes  
 AN 2001:694156 CAPLUS  
 DN 136:86166  
 TI Synthesis and application of novel catalytically active polymers  
 containing 1,4,7-triazacyclononanes  
 AU Grenz, Achim; Ceccarelli, Simona; Bolm, Carsten  
 CS Institut fuer Organische Chemie der RWTH Aachen, Aachen, D-52056, Germany  
 SO Chemical Communications (Cambridge, United Kingdom) (2001), (18),  
 1726-1727  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 AB New polymers contg. 1,4,7-triazacyclononanes have been synthesized by  
 means of ring opening **metathesis** polymn. (ROMP); their complexes  
 with Mn catalyze the oxidn. of simple olefins by hydrogen peroxide.  
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.39	72.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.65	-11.07

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STRUCTURE FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6  
 DICTIONARY FILE UPDATES: 28 SEP 2003 HIGHEST RN 594810-89-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
 PROPERTIES for more information. See STNote 27, Searching Properties  
 in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e methyl 2-heptenoate/cn

E1	1	METHYL 2-GERANYL-3-OXOBUTANOATE/CN
E2	1	METHYL 2-HEPTADECENOATE/CN
E3	1 -->	METHYL 2-HEPTENOATE/CN
E4	1	METHYL 2-HEPTYL-4,6-DIHYDROXYBENZOATE/CN
E5	1	METHYL 2-HEPTYL-4,6-DIMETHOXYBENZOATE/CN
E6	1	METHYL 2-HEPTYL-4-HYDROXY-6-METHOXYBENZOATE/CN
E7	1	METHYL 2-HEPTYNOATE/CN

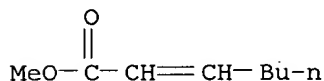
E8 1 METHYL 2-HEXADECYLGLYCIDATE/CN  
 E9 1 METHYL 2-HEXADECYLOCTADECANOATE/CN  
 E10 1 METHYL 2-HEXADECYNOATE/CN  
 E11 1 METHYL 2-HEXENOATE/CN  
 E12 1 METHYL 2-HEXYL ACRYLATE/CN

=> e3

L54 1 "METHYL 2-HEPTENOATE"/CN

=> d 154

L54 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 22104-69-4 REGISTRY  
 CN 2-Heptenoic acid, methyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN **Methyl 2-heptenoate**  
 FS 3D CONCORD  
 MF C8 H14 O2  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
 CHEMINFORMRX, CSCHEM, SPECINFO, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

18 REFERENCES IN FILE CA (1907 TO DATE)  
 18 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.10	79.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

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FILE COVERS 1907 - 30 Sep 2003 VOL 139 ISS 14  
FILE LAST UPDATED: 29 Sep 2003 (20030929/ED)

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> 154/prep

18 L54  
3057580 PREP/RL  
L55 7 L54/PREP  
(L54 (L) PREP/RL)

=> 152 and 155

L56 0 L52 AND L55

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.14	81.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 07:26:11 ON 30 SEP 2003